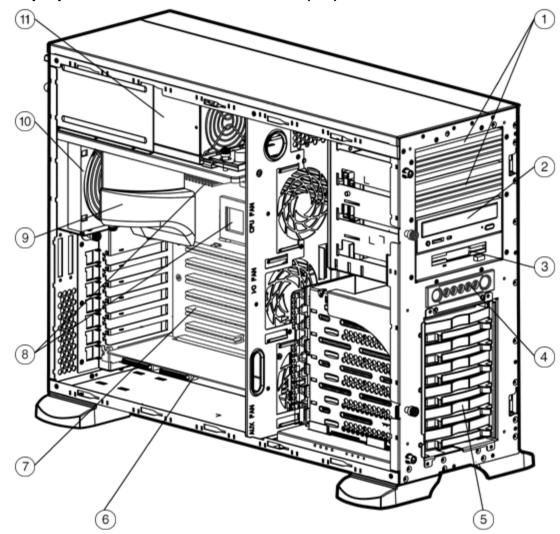
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QuickSpecs

Compaq ProLiant ML350 Generation 2 (G2)



- 1. Two available removable media bays
- 2. 40x Max IDE CD-ROM Drive
- 3. 1.44MB Floppy Drive
- LED/Button assembly (left to right: Unit ID, Internal System Health, External System Health, NIC Activity, Power)
- 5. Six 1" Hot Plug Drive Bays
- Server Feature Board (with embedded video, SCSI, NIC and ASM (Advanced Server Management))
- Six PCI Slots (five 64-bit/33MHz PCI slots, one 32-bit/33 MHz PCI slot)
- Pentium III Processor Sockets (one processor ships standard, dual processor capable)
- 9. Baffle
- System Fan
- Optional Hot-Plug Redundant 350W Power Supply (1+1)



At A Glance

- The Compaq ProLiant™ ML350 Generation 2 (G2) 2-way rack or tower server delivers affordable performance and essential availability to corporate workgroups and growing businesses
- Intel Pentium III 1.40 GHz, or 1.26 GHz FC-PGA2 (Flip Chip-Pin Grid Array) processor (dual processor capability) with 512-KB second level ECC cache standard (full speed)
- Array Models ship with the Smart Array 532 Controller and 256-MB SDRAM Memory standard
- ServerWorks LE 3.0 Chipset with 133-MHz Front Side Bus
- 128-MB or 256-MB (Array Models) PC133-MHz Registered ECC SDRAM DIMM memory standard, expandable to 4-GB
- 133-MHz GTL Bus Design
- Six available PCI slots: five 64-bit/33-MHz PCI, one 32-bit/33-MHz PCI, two USB ports
- Integrated Dual Channel Wide Ultra3 SCSI Adapter
- Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL (Wake On LAN)
- Support for up to six 1 Wide Ultra3 SCSI hot plug hard drives
- Internal storage capacity of up to 1.174-GB (6 x 146.8 GB 1 \pm 2 x 146.8 GB 1)
- 350W Hot-Pluggable Power Supply (standard) and an optional 350W Hot-Pluggable Redundant Power Supply available
- Standard 6 x 1 Wide Ultra2/Ultra3 Hot Plug Drive Cage
- Tool-free entry to chassis and access to components
- RBSU (ROM based setup utility) support, redundant ROM
- Compaq Insight Manager™, Compaq SmartStart™, ROM-based BIOS Setup Utility, and Automatic Server Recovery (ASR-2)
- Protected by Compaq Services, including a three-year, Next Business Day on-site, limited, Global warranty and extended Pre-Failure Warranty that covers processors, memory and disk drives — Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center at 1-800-345-1518 for details.

ontents

Overview Standard Features Models Options Memory Storage

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Standard Features

Processor (One of Intel Pentium III 1.40 GHz FC-PGA2 Processor

the following

depending on model)

Intel Pentium III 1.26 GHz FC-PGA2 Processor

Cache Memory Integrated 512-KB Level 2 ECC cache (full speed)

Upgradability Upgradable to dual processing

Chipset ServerWorks LE 3.0 Chipset with 133-MHz Front Side Bus

Note: For more information regarding ServerWorks, please see the following URL:

http://www.serverworks.com/products/overview.html.

Memory (One of the following depending on model) Standard 256 MB (PC133-MHz ECC Registered SDRAM DIMM memory)

(Array Models only)

Maximum 4 GB

Standard 128 MB (PC133-MHz ECC Registered SDRAM DIMM memory)

Maximum 4 GB

Network Controller Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL (Wake On LAN)



Expansion Slots I/O (6 Total, 6 PCI Voltage:

Available)

64-bit/33MHz, 5 (5 available) (Array model has 4 3.3 Volt

PCI available)

32-bit/33MHz, 1 (1 available) 5 Volt

PCI

Storage Controller Integrated Dual Channel Wide Ultra3 SCSI Adapter

Smart Array 532 Controller (Array Models Only)

Storage Diskette Drives 1.44 MB

CD-ROM 40x IDE (ATAPI) CD-ROM Drive

Hard Drives None

Maximum 1.174 TB (6 x 146.8 GB 1 with standard internal hot plug drive cage Internal Storage + (2 x 146.8 GB 1) with optional ML3xx Internal Two Bay Hot Plug

SCSI Drive Cage)

External Storage Two external SCSI knockouts available, but requires optional

ProLiant ML350 Internal to External SCSI Cable Option Kit (PN

159547-B22)

Interfaces Parallel 1

Serial 2 Pointing Device 1 (Mouse)

Graphics 1
Keyboard 1
Network RJ-45 1
USB 2

Note: Please see the following URL for additional information

regarding USB support:

http://www.compaq.com/products/servers/

platforms/usb-support.html.

External SCSI 2

knockouts

Graphics Integrated ATI RAGE XL Video Controller with 8-MB SDRAM Video Memory

Form Factor Tower or rack (5U)

Product Demo To view the Product Demo, please see the following URL, then click on

PRODUCT DEMO:

http://www5.compaq.com/productsservers/proliantml350/index-g2.html

ProLiant Essentials Foundation Pack Software Insight Manager Insight Manager 7 helps maximize system uptime and performance

and reduces the cost of maintaining the IT infrastructure by

providing proactive notification of problems before those problems result in costly downtime and reduced productivity. Insight Manager 7 is easy to set up and provides rapid access to detailed fault and performance information gathered by the Management Agents. One-click-access to the Remote Insight Lights Out Edition board



allows systems administrators to take full graphical control of ProLiant servers in remote locations or lights-out data centers. Finally, Insight Manager 7 in concert with the Version Control Agents and Version Control Repository Manager enables systems administrators to version manage and update system software across groups of ProLiant servers.

Management Agents

The Management Agents form the foundation for HP's Intelligent Manageability strategy. They provide direct, browser-based access to in-depth instrumentation built into HP servers, workstations, desktops, and portables, and send alerts to Insight Manager 7 and other enterprise management applications in case of subsystem or environmental failures. For additional information about the Management Agents and other management products from HP, please visit the management website at

http://www.hp.com/servers/manage.

SmartStart

SmartStart is a tool that simplifies server setup, providing a rapid way to deploy reliable and consistent server configurations. For more information, please visit the SmartStart website at http://www.hp.com/servers/smartstart.

SmartStart version supported (minimum): SmartStart 5.20

ActiveUpdate

ActiveUpdate is a web-based application that keeps IT managers directly connected to HP for proactive notification and delivery of the latest software updates.

ROMPag The latest software, drivers, and firmware fully optimized and tested support software, for your ProLiant server and options.

and configuration utilities

Survey Utility utilities

The most advanced configuration analysis, reporting and and diagnostics troubleshooting utilities used by HP and at your fingertips.

Optional **ProLiant**

Optional software offerings that selectively extend the functionality of an Adaptive Infrastructure to address specific business problems

Essentials Value and needs:

Packs

- Rapid Deployment Pack an automated solution for multiserver deployment and provisioning, enabling companies to quickly and easily adapt to changing business demands.
- Workload Management Pack provides easier management of complex environments, improving overall server utilization and enabling Windows 2000 customers for the first time to confidently deploy multiple applications on a single multiprocessor ProLiant Server.
- Recovery Server Option Pack entry-level high availability software that will provide reliable protection and increased uptime against server hardware and operating system failures.
- Performance Management Pack a performance management solution that identifies and explains hardware performance bottlenecks on ProLiant servers and attached options enabling users to better utilize their valuable resources.

Note: Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to http://www.hp.com/servers/ProLiantessentials or the various ProLiant Essentials Value Pack product QuickSpecs for more information.

Note: For more information regarding ProLiant Essentials Software, please see the following URL: http://www.hp.com/servers/proliantessentials.

Note: These Web sites are available in English only.



Compliance

Industry Standard ACPI V1.0B Compliant PCI 2.2 Compliant

> **PXE Support WOL Support**

Microsoft Logo certifications

Manageability

Insight Manager 7 Redundant ROM Remote Flash ROM

Remote Insight Lights-Out Edition (optional) ProLiant RBSU (ROM-Based Setup Utility) Automatic Server Recovery-2 (ASR-2)

Drive Parameter Tracking (with Smart Array Controller) Dynamic Sector Repairing (with Smart Array Controller)

Pre-Failure Warranty (covers processors, memory and hard drives)

Security

Power-on password Setup password Diskette boot control

Parallel and serial interface control

Disk configuration lock Power switch security

Server Power

One Lowline power cord ships standard.

Cords

Note: Country specific power cords ship with all ProLiant ML350 G2 Models.

Power Supply

350 Watts, Power Factor Correction (PFC), Hot Plug 100 to 240 VAC Rated Input

Voltage (Auto-sensing), CE Mark Compliant.

Note: Power Supply and optional Hot Plug Redundant Power Supply are shipped with

their own fan.

Note: Optional Hot Plug Redundant Power Supply available (PN 237046-xx1).

System Fans

1 fan ships standard. 1 total supported internally.

Required Cabling

For required cabling information, refer to the Compaq Web site at

http://www.compaq.com/products/servers/proliantML350.

Note: This Web site is available in English only.

OS Support

Microsoft Windows NT Server 4.0

Microsoft BackOffice Small Business Server 2000 Microsoft Windows 2000 Server and Advanced Server

Novell NetWare 5.1

Novell NetWare Small Business Suite 5.1

SCO OpenServer SCO UnixWare

IBM OS/2 Warp Family for e-business and Warp Server for e-business Convenience

Pack

LINUX (RedHat , SuSE , Caldera eServer, Open Linux Server)



Note: For a more complete and up-to-date listing of supported OSs and versions, please visit our OS Support Matrix at:

ftp://ftp.compaq.com/pub/products/servers/os-support-matrix-310.pdf.

Note: Optional hardware may be required to support some operating systems.

Note: For an up-to-date listing of the latest drivers available for the Compaq ProLiant ML350, please see:

http://www.compaq.com/support/files/server/us/index.html.

Rack Airflow Requirements

Rack 9000 and 10000 series Cabinets

The increasing power of new high-performance processor technology requires increased cooling efficiency for rack-mounted servers. The Compaq 9000 Series Rack and the new 10000 Series Racks provides enhanced airflow for maximum cooling, allowing these racks to be fully loaded with servers using the latest processors.

Rack 7000 series Cabinets

When installing a server with processors running at speeds of 550 MHz or greater in Compaq Rack 7000 series racks with glass doors (165753-001 (42U), and 163747-001 (22U)), the new processor technology requires the installation of High Airflow Rack Door Inserts (327281-B21 (42U), 327281-B22 (42U 6 pack), or 157847-B21 (22U)) to promote enhanced airflow for maximum cooling.

CAUTION: If a third-party rack is used, observe the following additional requirements to ensure adequate airflow and to prevent damage to the equipment:

- Front and rear doors: If your 42U server rack includes closing front and rear doors, you must allow 5,350 sq cm (830 square inches) of hole evenly distributed from top to bottom to permit adequate airflow (equivalent to the required 64 percent open area for ventilation).
- O <u>Side:</u> The clearance between the installed rack component and the side panels of the rack must be a minimum of 7 cm (2.75 inches)

CAUTION: Always use blanking panels to fill all remaining empty front panel U-spaces in the rack. This arrangement ensures proper airflow. Using a rack without blanking panels results in improper cooling that can lead to thermal damage.

Note: For additional information, refer to the Setup and Installation Guide or the Documentation CD provided with the server, or to the server documentation located in the Support section at the following URL:

http://www5.compaq.com/products/servers/proliantml350/index.html

Service and Support

Compaq Services provides a three-year, limited warranty, including Pre-Failure Warranty (coverage of hard drives, memory and processors) fully supported by a worldwide network of resellers and service providers. Compaq technical assistance is available 7x24, toll free in the United States and Canada. Telephone support services may be covered under warranty or available for an additional fee.

Note: Limited Warranty includes 3 year Parts, 3 year Labor, 3-year on-site support.

A full range of CarePaq packaged hardware and software services:

- Installation and start up
- Extended coverage hours and enhanced response times
- System management and performance services
- Availability and recovery services

Note: For more information, customer/resellers can contact http://www.compag.com/services.

Please see the following URL regarding Warranty Information For Your Compaq Products: http://www.compaq.com/support/warranty_upgrades/



web statements/176738.html.

For additional information regarding Worldwide Limited

Warranty and Technical Support, please see the following URL:

ftp://ftp.compaq.com/pub/supportinformation/ejourney/176738.pdf.

Note: Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center at 1-800-345-1518 for details.

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Models

Models		
ML350T02 P1400- 512KB,	Processor	(1) Intel Pentium III FC-PGA2 1.40 GHz Processor standard (up to 2 supported)
256MB Array 267124-xx1	Cache Memory	Integrated 512-KB Level 2 ECC
	Memory	256-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
Note: Not available in EMEA.	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter and Smart Array 532 Controller
	Hard drive	None ship standard
	Internal Storage	1.174 TB maximum hot plug (with optional hard drives $\&\ drive$ cage)
	Optical Drive	40x IDE (ATAPI) CD-ROM Drive
	Form Factor	Tower (5U)
ML350T02 P1400- 512KB,		
512KB,	Processor	(1) Intel Pentium III FC-PGA2 1.40 GHz Processor standard (up to 2 supported)
	Processor Cache Memory	
512KB, 128MB		(up to 2 supported)
512KB, 128MB	Cache Memory	(up to 2 supported) Integrated 512-KB Level 2 ECC 128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC
512KB, 128MB	Cache Memory Memory Network	(up to 2 supported) Integrated 512-KB Level 2 ECC 128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100
512KB, 128MB	Cache Memory Memory Network Controller Storage	(up to 2 supported) Integrated 512-KB Level 2 ECC 128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
512KB, 128MB	Cache Memory Memory Network Controller Storage Controller Hard drive	(up to 2 supported) Integrated 512-KB Level 2 ECC 128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL Integrated Dual Channel Wide Ultra3 SCSI Adapter
512KB, 128MB	Cache Memory Memory Network Controller Storage Controller Hard drive	(up to 2 supported) Integrated 512-KB Level 2 ECC 128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL Integrated Dual Channel Wide Ultra3 SCSI Adapter None ship standard 1.174 TB maximum hot plug (with optional hard drives & drive

ML350T02 P1266-512KB,

256MB Array 263635--xx1

Processor

(1) Intel Pentium III FC-PGA2 1.26-GHz Processor standard

(up to 2 supported)

Cache Memory Integrated 512-KB Level 2 ECC

Memory 256-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC

Registered SDRAM DIMM

Note: Not available in

EMEA.

Network Controller Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100

WOL



Storage Integrated Dual Channel Wide Ultra3 SCSI Adapter and

Controller Smart Array 532 Controller

Hard drive None ship standard

Internal Storage 1.174 TB maximum hot plug (with optional hard drives & drive

cage)

Optical Drive 40x IDE (ATAPI) CD-ROM Drive

Form Factor Tower (5U)

ML350T02 P1266-

512KB, 128MB

225861-xx1

Processor (1) Intel Pentium III FC-PGA2 1.26-GHz Processor standard

(up to 2 supported)

Cache Memory Integrated 512-KB Level 2 ECC

Memory 128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC

Registered SDRAM DIMM

Network Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100

Integrated Dual Channel Wide Ultra3 SCSI Adapter

Controller WOL

Storage

Controller

Hard drive None ship standard

Internal Storage 1.174 TB maximum hot plug (with optional hard drives & drive

age)

Optical Drive 40x IDE (ATAPI) CD-ROM Drive

Form Factor Tower (5U)

ML350R02 P1400-

512KB, 256MB Array

267125-xx1

Processor (1) Intel Pentium III FC-PGA2 1.40 GHz Processor standard

(up to 2 supported)

Cache Memory Integrated 512-KB Level 2 ECC

Memory 256-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC

Registered SDRAM DIMM

Note: Not available in

EMEA

Network Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100

Controller WOL

Storage Integrated Dual Channel Wide Ultra3 SCSI Adapter and Controller Smart Array 532 Controller

Hard drive None ship standard

Internal Storage 1.174 TB maximum hot plug (with optional hard drives & drive

cage)

Optical Drive 40x IDE (ATAPI) CD-ROM Drive

Form Factor Rack (5U)

ML350R02 P1400-

512KB, 128MB 266242-xx1 Processor (1) Intel Pentium III FC-PGA2 1.40 GHz Processor standard

(up to 2 supported)

Cache Memory Integrated 512-KB Level 2 ECC

Memory 128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC

Registered SDRAM DIMM

Network Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100

Controller WOL

Storage Integrated Dual Channel Wide Ultra3 SCSI Adapter

Controller



Hard drive None ship standard

Internal Storage 1.174 TB maximum hot plug (with optional hard drives & drive

cage

Optical Drive 40x IDE (ATAPI) CD-ROM Drive

Form Factor Rack (5U)

ML350R02 P1266-512KB,

256MB Array 263636-xx1

Processor (1) Intel Pentium III FC-PGA2 1.26 GHz Processor standard

(up to 2 supported)

Cache Memory Integrated 512-KB Level 2 ECC

Memory 256-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC

Registered SDRAM DIMM

Note: Not available in

EMEA.

Network Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100

Controller WO

Storage Integrated Dual Channel Wide Ultra3 SCSI Adapter and

Controller Smart Array 532 Controller

Hard drive None ship standard

Internal Storage 1.174 TB maximum hot plug (with optional hard drives & drive

cage)

Optical Drive 40x IDE (ATAPI) CD-ROM Drive

Form Factor Rack (5U)

ML350R02 P1266-

512KB, 128MB

128MB 225862-xx1

Processor (1) Intel Pentium III FC-PGA2 1.26 GHz Processor standard

(up to 2 supported)

Cache Memory Integrated 512-KB Level 2 ECC

Memory 128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC

Registered SDRAM DIMM

Network Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100

Integrated Dual Channel Wide Ultra3 SCSI Adapter

Controller WO

Storage

Controller

Hard drive None ship standard

Internal Storage 1.174 TB maximum hot plug (with optional hard drives & drive

cage)

Optical Drive 40x IDE (ATAPI) CD-ROM Drive

Form Factor Rack (5U)

Country Code Key

XX=00 U.S. English

XX=01 Australia

XX=02 Int'l

XX=03 UK

XX=04 Germany

XX=05 France

XX=37 APD

XX=42 EURO

XX=29 Japan

XX=AA PRC



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Options

Compaq ProLiant ML350 Generation 2 (G2) Unique Options	Hot Plug Redundant Power Supply Option Kit (NA, LA)	237046-001
	Hot Plug Redundant Power Supply Option Kit (AUST)	237046-011
	Hot Plug Redundant Power Supply Option Kit (EURO)	237046-021
	Hot Plug Redundant Power Supply Option Kit (UK)	237046-031
	Hot Plug Redundant Power Supply Option Kit (Japan)	237046-291
	ProLiant ML350 Generation 2 (G2) Tower to Rack Conversion Kit	237045-B21

ProLiant Essentials	Value
Pack Software	

ProLiant ML350 Generation 2 (G2) Tower to Rack Conversion Kit	237045-B21
Rapid Deployment Pack, 1 User, V1.x Note: This license allows 1 server to be managed and deployed via the Deployment Server.	267196-B21
Rapid Deployment Pack, 1 User, V1.x (Japan) Note: This license allows 1 server to be managed and deployed via the Deployment Server.	267196-291
Rapid Deployment Pack, 10 Users, V1.x Note: This license allows 10 servers to be managed and deployed via the Deployment Server.	269817-B21
Rapid Deployment Pack, 10 Users, V1.x (Japan) Note: This license allows 10 servers to be managed and deployed via the Deployment Server.	269817-291
ProLiant Essentials Workload Management Pack (Featuring Compaq Resource Partitioning Manager version 2.0)	303284-B21
ProLiant Essentials Recovery Server Option Pack	280189-B21
ProLiant Essentials Performance Management Pack v2.0, Single License	306696-B21

Note: Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to http://www.hp.com/servers/proliantessentials or the various ProLiant Essentials Value Pack product QuickSpecs for more information.

Note: For more information regarding ProLiant Essentials Software, please see the following URL: http://www.hp.com/servers/proliantessentials.

Note: These Web sites are available in English only.

Software	HP digital asset protection	302316-001

NetServer to ProLiant integrations services

HP NetServer to ProLiant integration and assessment 304164-002 service

Note: HP identifies current levels of NetServer support, services, and management. This service helps maximize customer's ability to add ProLiant platforms into their current environment.

HP TopTools to Insight Manager 7 installation and startup 304163-002



Note: Provides on-site review, installation and configuration services for Insight Manager 7. HP will also re-create, as closely as possible, the views and reports from the customer's current TopTools configuration. This service assures a smooth transition to the ProLiant Essentials software.

HP NetServer to ProLiant Essentials Rapid Deployment Pack installation and startup service Note: Install and configure Rapid Deployment Pack in a test environment, then deploy a server image to a maximum of 250 systems in the production environment. This service helps to assure successful system

deployment.

304162-002

Processor

Pentium III P1400-512KB Processor Option Kit Note: This processor option kit (PN 231118-B21) supports the ProLiant ML350 Generation 2 (G2), and ProLiant ML370 Generation 2 (G2) servers.

Pentium III P1266-512KB (FC-PGA2) Processor Option Kit Note: This processor option kit (PN 231117-B21) supports the ProLiant ML350 Generation 2 (G2), and ProLiant ML370 Generation 2 (G2) servers.

Pentium III P1133-512KB (FC-PGA2) Processor Option Kit Note: This processor option kit (PN 238888-B21) supports the ProLiant ML350 Generation 2 (G2), and ProLiant ML370 Generation 2 (G2) servers. It includes a heatsink and VRM.

238888-B21

244059-B21

231118-B21

231117-B21

Memory (DIMMs)

1024-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit	128280-B21
512-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit	128279-B21
256-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit	128278-B21
128-MB PC133-MHz Registered ECC SDRAM DIMM	128277-B21

Internal Storage

ML3xx Two Bay Hot Plug SCSI Drive Cage Note: The drive cage option kit (PN 244059-B21) has one 1 drive bay and one 1.6 drive bay, installed in two available removable media bays.

Note: The Drive Cage must be shipped separately from your ML350 G2 server. Failure to do so can cause damage to the ML350 G2 removable media drive bays.

Optical Drives 16X DVD-ROM Drive Option Kit (Carbon) 217053-B21

Hard Drives Ultra320 SCSI – Universal Hot Plug

Memory Option Kit

36.4GB 10,000 rpm, U320 Universal Hard Drive, 1	286713-B22
72.8GB 10,000 rpm, U320 Universal Hard Drive, 1	286714-B22
146.8GB 10,000 rpm, U320 Universal Hard Drive, 1	286716-B22
18.2GB 15,000 rpm, U320 Universal Hard Drive, 1	286775-B22
36.4GB 15,000 rpm, U320 Universal Hard Drive, 1	286776-B22



72.8GB 15,000 rpm, U320 Universal Hard Drive, 1

286778-B22

Note: All U320 Universal Hard Drives are backward compatible to U2 or U3 speeds and will run at U3 within the ML350 G2.

Note: Please see the Hard Drive QuickSpecs for Technical Specifications such as capacity, height, width, interface, transfer rate, seek time, physical configuration, and operating temperature:

U320 Hard Drive QS:

http://www5.compag.com/products/guickspecs/11531_div/

11531 div.HTML (Division/World Wide)

http://www5.compag.com/products/quickspecs/11531_na/

11531 na.HTML (North America)

Storage Controllers

RAID LC2 Controller	188044-B21
RAID LC2 Controller (Japan)	188044-291
Smart Array 532 Controller	225338-B21
Smart Array 532 Controller (Japan)	225338-291
Smart Array 5302/128 Controller	283552-B21
Smart Array 5302/128 Controller (Japan)	283552-291
Smart Array 5304/256 Controller	283551-B21
Smart Array 5304/256 Controller (Japan)	283551-291
Ultra3 Channel Expansion Module for Smart Array 5300 Controller	153507-B21
128-MB Cache Module for Smart Array 5302 Controller	153506-B21
256-MB Battery-Back Cache Module Note: This 256-MB Battery-Backed Cache Module supports the Smart Array 5300 series controllers, MSA 1000 and the Smart Array Cluster Storage.	254786-B21
Advanced Data Guarding Module for Smart Array 5302 Controller	199371-B21
RAID ADG Upgrade for Smart Array 5302	288601-B21
64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter	154457-B21
64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter	129803-B21
64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS	284688-B21

Note: Please see the following Controller or SCSI Adapter QuickSpecs for Technical Specifications such as PCI Bus, PCI Peak Data Transfer Rate, SCSI Protocols supported, SCSI Peak Data Transfer Rate, Channels, SCSI Ports, Drives supported, Cache, RAID support, and additional information: http://www5.compaq.com/products/quickspecs/10652_div/

10652 div.HTML (RAID LC2)

http://www5.compaq.com/products/quickspecs/10851 div/

10851 div.HTML (Smart Array 532)

http://www5.compaq.com/products/quickspecs/10640 div/

10640 div.HTML (Smart Array 5300 Series)

http://www5.compaq.com/products/quickspecs/10429 div/

10429 div.HTML (SCSI Adapter)



Wireless HAP Solution	Compaq WL410 W	/ireless SMB Acces	s Point (US)	191811-001
	Compaq WL410 W	/ireless SMB Acces	s Point (Australia)	191811-011
	Compaq WL410 W	/ireless SMB Acces	s Point (Europe)	191811-021
	Compaq WL410 W	/ireless SMB Acces	s Point (UK)	191811-031
	Compaq WL410 W	/ireless SMB Acces	s Point (Japan)	191811-291
	Compaq WL410 W	/ireless SMB Acces	s Point (China)	191811-AA1
	Compaq WL410 W	/ireless SMB Acces	s Point (Korea)	191811-AD1
	Compaq WL410 W	/ireless SMB Access	s Point (S. Africa)	191811-AR1
Communications	Compaq NC3123 F	Fast Ethernet NIC P	CI 10/100 WOL	174830-B21
	Compaq NC3134 I 10/100	Fast Ethernet NIC 6	4 PCI Dual Port	138603-B21
		Fast Ethernet Modu or NC3134 and NC3		138604-B21
	Compaq NC6132 (Module for NC313	Gigabit Module 1000 4 and NC3131	0 SX Upgrade	338456-B23
	Compaq NC3133 I Module for NC313	Fast Ethernet Modul 4 and NC3131	le 100FX Upgrade	338456-B25
	Compaq NC7132 NC3134 and NC3	10/100/1000-T Upgi 131	rade Module for	153543-B21
	Compaq NC6136 (PCI, 1000 SX	Gigabit Server Adap	ter, 64-bit/66MHz,	203539-B21
	Compaq NC7131 (PCI, 10/100/1000-	Gigabit Server Adap T	ter, 64-bit/66MHz,	158575-B21
	Compaq NC7132 NC3134 and NC3	10/100/1000-T Upgi 131	rade Module for	153543-B21
		7, NC61XX, or NC71 3 NC3163 Network		d for redundancy
	56K v.90 PCI Mode	em		239137-xx1
Country Code Key	XX = 00	US	XX = 15	Greece
	XX = 01	Austria	XX = 16	S. America
	XX = 03	UK	XX = 17	ARAB
	XX = 04	Germany	XX = 18	Belgium
	XX = 05	France	XX = 24	Poland
	XX = 06	Italy	XX = 28	Thailand
	XX = 07	Spain	XX = 29	Japan
	XX = 08	Denmark	XX = 33	Netherlands
	XX = 09	Norway	XX = 35	Finland
	XX = 10	Sweden/Finland	XX = 37	APD
	XX = 11	Switzerland	XX = AB	Taiwan
	XX = 12	French Canadian	XX = AD	Korea
	XX = 13	Portugal	XX = BB	HE
	XX = 14	Turkey	XX = C9	LA MERCO



Redundant Options	Hot Plug Redundant Power Supply Option Kit (NA, LA)	237046-001
	Hot Plug Redundant Power Supply Option Kit (AUST)	237046-011
	Hot Plug Redundant Power Supply Option Kit (EURO)	237046-021
	Hot Plug Redundant Power Supply Option Kit (UK)	237046-031
	Hot Plug Redundant Power Supply Option Kit (Japan)	237046-291
Management Options	Remote Insight Lights-Out Edition II (NA, LA)	227251-001
	Remote Insight Lights-Out Edition II (EMEA)	227251-021
	Remote Insight Lights-Out Edition II (ROW)	227251-371
	Compaq Remote Insight Lights-Out Edition (NA, LA)	157866-001
	Compaq Remote Insight Lights-Out Edition (EURO)	157866-021
	Compaq Remote Insight Lights-Out Edition (APD, Japan)	157866-371
Security	HP/Atalla AXL600L SSL Accelerator Card for ProLiant Servers	524545-B21
	Compaq AXL300 Accelerator PCI Card for ProLiant Servers	227933-B21
Monitors	Flat Panel TFT1825 18 Color Monitor Two-Tone (Carbon/Silver)	296751-xxx
	Flat Panel TFT1720 17 Color Monitor Two-Tone (Carbon/Silver)	295926-xxx
	Flat Panel TFT1520 15 Color Monitor Two-Tone (Carbon/Silver)	295925-xxx
	Flat Panel TFT2025 20 Color Monitor Two-Tone (Carbon/Silver)	285550-xxx
	TFT5110R Flat Panel Monitor (Carbon)	281683-B21
	TFT5010R Flat Panel Monitor (NA)	217248-001
	TFT5010R Flat Panel Monitor (Int'l)	217248-B31
	TFT5010R Flat Panel Monitor (Japan)	217248-291

CRT Country Code Key

NORTH AMERICA (NA)/LATIN AMERICA (LA)

Dash #	Description
-001	NA Kit with US Power Cord
-002	Carbon model with US Power Cord
-003	Touch Screen model with US Power Cord
-004	NAFTA model with US Power Cord (Made in Mexico)
-005	NA Kit with Powered Speakers
-006	GSA model with US Power Cord
-007	NH MPR model with US power cord (Made in Mexico)
-B24	TCO model without power cord (Digital Classic)
-201	EH model for Brazil (older Brazil models used -B29)
-202	EH model for Brazil Carbon (older Brazil models used -B29)
-C91	EH model for Mercosur countries



-C92 EH model for Mercosur countries Carbon
-B29 EH/ALADI model for Latin America

Note: All NA/LA models above are NH.

EUROPE, MIDDLE EAST AND AFRICA (EMEA)

Dash #	Description
-021	NH/TCO with Eurocord (DCE Hub)
-022	NH/MPR with Eurocord (DCE Hub) (India)
-023	NH Carbon model with Eurocord (DCE Hub)
-024	NH Touch Screen model with Eurocord (DCE Hub)
-025	NH Kit with Speakers and Eurocord
-A91	NH/TCO without power cord (Dubai hub)
-A92	NH/MPR without power cord (Dubai hub)
-031	NH/TCO with UK Cord (UK Hub)
-032	NH/MPR with UK Cord (UK Hub)
-033	NH/TCO carbon with UK Cord
-035	NH Kit with Speakers and UK Cord
-B21	SH/MPR without power cord (S. Africa Hub)
-B23	SH/TCO without power cord (S. Africa Hub)
-B27	SH/TCO Carbon without power cord (S. Africa Hub)

PACIFIC/AUSTRALIA (APD)

Dash #	Description
-B22	NH/MPR without power cord
-B24	NH/TCO without power cord
-B25	EH Carbon model without power cord
-B26	NH Touch Screen model without power cord
-011	SH model with AUZ/NZ power cord
-015	SH model with speakers AUZ/NZ power cord
-012	SH Carbon model with AUZ/NZ power cord
-AD1	NH model for Korea
-AD2	NH Carbon model for Korea
-B28	EH model without power cord
-B35	EH model with speakers no power cord (Singapore)

GREATER CHINA (GCD)

Dash #	Description
-AA1	NH/China Kit with CCIB label (Local Sales)
-AA2	NH/ Carbon China Kit with CCIB label (Local Sales)
-KA1	NH/China Kit with CCIB label (External Sales/Bundles in HK)
-AB1	NH/Taiwan kit, made in Taiwan

JAPAN (CKK)

Dash #	Description
-291	NH/Japan Kit with 3-2 pin adapter
-292	NH Carbon Japan Kit with 3-2 pin adapter

TFT Country Code Key EUROPE, MIDDLE EAST & AFRICA (EMEA)



Dash # Description
-021 Europe
-031 UK

NORTH AMERICA

Dash # Description

-001 NA

-B24 All NA/LA models

APD

Dash # Description
-011 Australia/NZ

JAPAN (CKK)

Dash # Description
-291 Japan

Tape Drives

Note: In order to install certain tape drives internally, you may need to remove the rails that come standard on the drives and then re-insert the screws in the mounting holes.

Internal and External DAT Tape Drives

 Internal 12/24-GB DAT Drive (Opal)
 295513-B22

 Internal 12/24-GB DAT Drive (Opal) (Japan)
 295513-292

Note: Please see the 12/24-GB DAT Drive QuickSpecs for additional options such as cassettes and for an up-to-date listing of the latest O/S Support details, please see the following:

http://www5.compaq.com/products/quickspecs/10239 div/

10239_div.HTML (Division/World Wide)

http://www5.compaq.com/products/quickspecs/10239 na/

10239_na.HTML (North America)

HP StorageWorks 20/40-GB DAT DDS-4 Tape Drive, 157769-B22

Internal (Carbon) (WW)

HP StorageWorks 20/40-GB DAT DDS-4 Tape Drive, 157770-002

External (Carbon) (NA)

HP StorageWorks 20/40-GB DAT DDS-4 Tape Drive, 157770-B32

External (Int'l) (Carbon)

HP StorageWorks 20/40-GB DAT DDS-4 Tape Drive, 157770-292

External (Japan) (Carbon)

HP StorageWorks Internal 20/40-GB DAT, Hot Plug 215488-B21

(Carbon)

Note: Please see the 20/40-GB DAT Tape Drive QuickSpecs for additional options such as host bus adapters, controllers, cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:

http://www5.compaq.com/products/quickspecs/10426 div/

10426 div.HTML (Division/World Wide)

http://www5.compaq.com/products/quickspecs/10426_na/

10426_na.HTML (North America)



Internal and External AIT Tape Drives

Note: The Internal AIT Hot Plug Drives are supported in the drive bay only. When installing an AIT tape drive into an ML350 ProLiant server you must use the special screw included with the drive kit in order for the drive to seat properly in the ML350 drive bay.

HP StorageWorks Internal AIT 35-GB, LVD Tape Drive (Carbon)	216884-B21
HP StorageWorks External AIT 35-GB, LVD Tape Drive (Carbon) (NA)	216885-001
HP StorageWorks External AIT 35-GB, LVD Tape Drive (Carbon) (Int'I)	216885-B31
HP StorageWorks External AIT 35-GB, LVD Tape Drive (Carbon) (Japan)	216885-291
HP StorageWorks Internal AIT 35-GB, LVD, Hot Plug (Carbon)	216886-B21

Note: Please see the AIT 35-GB, LVD Tape Drive QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:

http://www5.compaq.com/products/quickspecs/10712_div/

10712_div.HTML (Division/World Wide)

http://www5.compaq.com/products/quickspecs/10712_na/10712_na.HTML (North America)

HP StorageWorks AIT 50-GB Tape Drive, Internal (Carbon) (WW)	157766-B22
HP StorageWorks AIT 50-GB Tape Drive, External (Carbon) (NA)	157767-002
HP StorageWorks AIT 50-GB Tape Drive, External (Int'I) (Carbon)	157767-B32
HP StorageWorks AIT 50-GB Tape Drive, External (Japan) (Carbon)	157767-292
HP StorageWorks Internal AIT 50-GB, Hot Plug (Carbon)	215487-B21
HP StorageWorks Rackmount AIT 50-GB, 3U (Single Drive)	274333-B21

Note: Please see the AIT 50-GB Tape Drive QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:

http://www5.compaq.com/products/quickspecs/10425_div/

10425_div.HTML (Division/World Wide)

http://www5.compaq.com/products/quickspecs/10425_na/

10425 na.HTML (North America)

HP StorageWorks Internal AIT 100-GB Tape Drive (Carbon)	249189-B21
HP StorageWorks External AIT 100-GB Tape Drive (carbon)	249160-001
HP StorageWorks External AIT 100-GB Tape Drive (carbon) (Int'I)	249160-B31
HP StorageWorks Internal AIT 100-GB, Hot-Plug (carbon)	249161-B21



Note: Please see the AIT 100-GB Tape Drive QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following: http://www5.compaq.com/products/quickspecs/11062_div/11062_div.HTML (Division/World Wide) http://www5.compaq.com/products/quickspecs/11062_na/11062_na.HTML (North America)

Internal and External DLT/SDLT Tape Drives

HP StorageWorks 40/80-GB DLT Tape Drive, Internal (Carbon)	146196-B22
HP StorageWorks 40/80-GB DLT Tape Drive, External (Carbon) (NA)	146197-B22
HP StorageWorks 40/80-GB DLT Tape Drive, External (Carbon) (Japan)	146197-293
HP StorageWorks Rackmount DLT 40/80, 3U (Single Drive)	274332-B21
HP StorageWorks Rackmount DLT 40/80, Dual-Drive, 3U (Two Drives)	274335-B21
HP StorageWorks Rackmount DLT 40/80, Tape Array III, 5U (Four Drives)	274337-B21

Note: Please see the 40/80-GB DLT Drive QuickSpecs for additional options such as host bus adapters, controllers, cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following: http://www5.compaq.com/products/quickspecs/10658_div/10658_div.HTML (Division/World Wide) http://www5.compaq.com/products/quickspecs/10658_na/10658_na.HTML (North America)

Internal and External DLT VS Tape Drives

HP StorageWorks DLT VS 40/80 Tape Drive, Internal (Carbon) (WW)	280129-B21
HP StorageWorks DLT VS 40/80 Tape Drive, External (Carbon) (NA)	280129-B22
HP StorageWorks DLT VS 40/80 Tape Drive, External (Carbon) (Int'I)	280129-B31
HP StorageWorks DLT VS 40/80 Tape Drive, External (Carbon) (Japan)	280129-291

Note: Please see the DLT VS 40/80 Tape Drive QuickSpecs for additional options such as host bus adapters, controllers, cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following: http://www5.compaq.com/products/quickspecs/11403_div/11403_div.HTML (Division/World Wide) http://www5.compaq.com/products/quickspecs/11403_na/11403_na.HTML (North America)

HP StorageWorks Rackmount SDLT 110/220, 3U (Single Drive)	274331-B21
HP StorageWorks Rackmount SDLT 110/220, Dual-Drive, 3U (Two Drives)	274334-B21
HP StorageWorks Rackmount SDLT 110/220, Tape Array III, 5U (Four Drives)	274336-B21



Note: Please see the SDLT 110/220-GB Tape Drive QuickSpecs for additional options such as adapters, controllers, and media, and for an up-to-date listing of the latest O/S Support details, please see the following:

http://www5.compaq.com/products/quickspecs/10772_div/

10772 div.HTML (Division/World Wide)

http://www5.compaq.com/products/quickspecs/10772_na/

10772 na.HTML (North America)

HP StorageWorks SDLT 160/320, Internal (carbon) (WW) 257319-B21
HP StorageWorks SDLT 160/320, External NA (carbon) 257319-001
HP StorageWorks SDLT 160/320, External WW (carbon) 257319-B31
HP StorageWorks SDLT 160/320, External Japan (carbon) 257319-291

Note: Please see the SDLT 160/320-GB Tape Drive QuickSpecs for additional options such as adapters, controllers, and media, and for an up-to-date listing of the latest O/S Support details, please see the following:

http://www5.compaq.com/products/quickspecs/11406_div/

11406_div.HTML (Division/World Wide)

http://www5.compaq.com/products/quickspecs/11406_na/

11406 na.HTML (North America)

External SuperLoader

DLT1 1280 SuperLoader

268664-B21

Note: Please see the *StorageWorks* DLT1 1280 SuperLoader by Compaq QuickSpecs for additional options and for an up-to-date listing of the latest O/S Support details, please see the following:

http://www5.compaq.com/products/quickspecs/11330_div/

11330 div.HTML_(Division/World Wide)

http://www5.compaq.com/products/quickspecs/11330 na/

11330_na.HTML_(North America)

Internal and External LTO Ultrium Tape Drives

HP StorageWorks LTO Ultrium 230 Tape Drive, Internal	Q1515A
(Carbon) WW	

HP StorageWorks LTO Ultrium 230 Tape Drive, External Q1516A

(Carbon) NA

HP StorageWorks LTO Ultrium 230 Tape Drive, External Q1517A

(Carbon) Int'l

Note: Please see the HP StorageWorks LTO Ultrium Tape Drive QuickSpecs for additional options such as controllers, and other related items, and for an up-to-date listing of the latest O/S Support details, please see the following:

http://www5.compaq.com/products/quickspecs/11415_div/

11415_div.HTML (Division/World Wide)

http://www5.compaq.com/products/quickspecs/11415_na/

11415_na.HTML (North America)

HP StorageWorks Ultrium 460 Tape Drive for ProLiant, Q1518A

Internal (Carbon) WW

HP StorageWorks Ultrium 460 Tape Drive for ProLiant, Q1519A

External (Carbon) NA

HP StorageWorks Ultrium 460 Tape Drive for ProLiant, Q1520A

External (Carbon) Int'l



Note: Please see the HP StorageWorks Ultrium 460 Tape Drives for ProLiant QuickSpecs for additional options such as data and cleaning cartridges, and for an up-to-date listing of the latest O/S Support details, please see the following:

http://www5.compaq.com/products/quickspecs/11530_div/11530_div.HTML (Division/World Wide) http://www5.compaq.com/products/quickspecs/11530_na/11530_na.HTML (North America)

Internal and External DAT Autoloader

20/40-GB DAT 8 Cassette Autoloader Internal (Opal)	166504-B21
20/40-GB DAT 8 Cassette Autoloader External (Opal)	166505-001
20/40-GB DAT 8 Cassette Autoloader External (Opal) (Int'l)	166505-B31
20/40-GB DAT 8 Cassette Autoloader External (Opal) (Japan)	166505-291

Note: Please see the 20/40-GB DAT DDS-4 8 Cassette Autoloader QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following: http://www5.compaq.com/products/quickspecs/10518_div/10518_div.HTML (Division/World Wide) http://www5.compaq.com/products/quickspecs/10518_na/10518_na.HTML (North America)

AIT Autoloader

HP StorageWorks AIT 35 GB Autoloader, Rackmount (Carbon) (NA)	280349-001
HP StorageWorks AIT 35 GB Autoloader, Rackmount (Carbon) (Int'I)	280349-B31
HP StorageWorks AIT 35 GB Autoloader Tabletop (Carbon) (NA)	280349-001
HP StorageWorks AIT 35 GB Autoloader, Tabletop (Carbon) (Int'I)	280349-B31

Note: Please see the AIT 35-GB Autoloader QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following: http://www5.compaq.com/products/quickspecs/11404_div/11404_div.HTML (Division/World Wide) http://www5.compaq.com/products/quickspecs/11404_na/11404_na.HTML (North America)



HP StorageWorks 1/8 Autoloader

HP StorageWorks 1/8 Autoloader, Tabletop, Ultrium 230	C9572CB	
HP StorageWorks 1/8 Autoloader, Tabletop, DLT VS80	C9264CB	
HP StorageWorks 1/8 Autoloader, Rackmount kit	C9266R	

Rackmount Tape Drive Kits

3U Rackmount Kit 274338-B21

Note: The 3U Rackmount Kit (PN 274338-B21) can support up to (2) full-height or (4) half-height tape drives and compatible with multiple Single-Ended and LVD SCSI Tape Drives including the 12/24-GB DAT, 20/40-GB DAT, 20/40-GB DAT DDS-4 8 Cassette Autoloader, AIT 35-GB LVD, AIT 50 GB, 20/40-GB DLT, 40/80-GB DLT, and the SDLT 110/220-GB Tape Drives.

5U Rackmount Kit 274339-B21

Note: The 5U Rackmount Kit (PN 274339-B21) can support up to (4) full-height tape drives and is compatible with all Compaq DLT/SDLT tape drives including the 20/40-GB DLT, 35/70-GB DLT, 40/80-GB DLT, and the SDLT 110/220-GB tape drives.

Note: Please see the Rackmount Tape Drive Kits QuickSpecs for additional information regarding these kits, please see the following: http://www5.compaq.com/products/quickspecs/10854_div/ 10854_div.HTML (Division/World Wide) http://www5.compaq.com/products/quickspecs/10854_na/ 10854_na.HTML (North America)

Rackmount Tape Drive Cable Kits

LVD Cable Kit, VHDCI/HD68	168048-B21
Note: For use with the 3U RM Storage Enclosure and DLT	
Tape Array III only.	
LVD Cable Kit, HD68/HD68	242381-B21
Note: For use with the 3U RM Storage Enclosure and DLT	
Tape Array III only.	

Tape Automation Entry Level Tape Libraries

SSL2020 Automated AIT Library

SSL2020 AIT Mini-Library 1 drive, 20 slot Table Top	175195-B21
SSL2020 AIT Mini-Library 2 drive, 20 slot Table Top	175195-B22
SSL2020 AIT Mini-Library 1 drive, 20 slot Rackmount	175196-B21
SSL2020 AIT Mini-Library 2 drive, 20 slot Rackmount	175196-B22
SSL2020 AIT Library Pass Thru with Transport	175312-B21
SSL2020 AIT Library Pass Thru Extender	175312-B22
AIT 50-GB Drive Add-On LVD Drive for SSL2020 AIT Library	175197-B21



Required Adapters/Controllers for SSL2020 AIT Library

64-Bit/66-Mhz Dual Channel Wide Ultra3 SCSI 129803-B21

Adapter

SAN Access Module for Smart Array 5302 Controller 216687-B21

SAN Access Module for Smart Array 5302 Controller 216687-291

(Japan)

Note: Please see the SSL2020 Automated AIT Tape Library Solution QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:

http://www5.compaq.com/products/quickspecs/10580_na/

10580 na.HTML (North America)

http://www5.compaq.com/products/quickspecs/10580 div/

10580 div.HTML (Division/World Wide)

MSL5000 Libraries

Mainstream Tape Library

MSL5026DLX DLT Library

MSL5026DLX, 1 40/80-GB DLT, LVD Table Top	231821-B21
MSL5026DLX, 2 40/80-GB DLT, LVD Table Top	231821-B22
MSL5026DLX, 1 40/80-GB DLT, LVD Rackmount	231891-B21
MSL5026DLX, 2 40/80-GB DLT, LVD Rackmount	231891-B22

MSL5026SL SDLT Library

Note: Please see the StorageWorks MSL5026DLX or MSL5026SL Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:

http://www5.compaq.com/products/quickspecs/10860_na/

10860_na.HTML (North America)

http://www5.compaq.com/products/quickspecs/10860_div/

10860 div.HTML (Division/World Wide)

MSL5026SL, Tabletop, 1 SDLT Drive (Graphite)	302511-B21
MSL5026SL, Tabletop, 2 SDLT Drives (Graphite)	302511-B22
MSL5026SL, Rackmount, 1 SDLT Drive (Graphite)	302512-B21
MSL5026SL, Rackmount, 2 SDLT Drive (Graphite)	302512-B22

Note: Please see the StorageWorks MSL5026SL Library QuickSpecs for additional information including UpgradeKits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:

http://www5.compaq.com/products/quickspecs/11440 na/

11440 na.HTML (North America)

http://www5.compaq.com/products/quickspecs/11440_div/

11440_div.HTML (Division/World Wide)



MSL5026S2 SDLT Library

MSL5026S2, Rackmount, 0 Drive Library	293472-B21
MSL5026S2, Rackmount, 1 Drive, SDLT2 Library	293472-B22
MSL5026S2, Rackmount, 2 Drives, SDLT2 Library	293472-B23
MSL5026S2FC, Rackmount, 1 Drive, SDLT2 Library	293472-B24
MSL5026S2FC, Rackmount, 2 Drives, SDLT2 Library	293472-B25
MSL5026S2, Tabletop, 1 Drive, SDLT2 Library	293473-B21
MSL5026S2, Tabletop, 2 Drives, SDLT2 Library	293473-B22

Note: Please see the StorageWorks MSL5026S2 Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at: http://www5.compaq.com/products/quickspecs/11453_na/11453_na.HTML (North America) http://www5.compaq.com/products/quickspecs/11453_div/

http://www5.compaq.com/products/quickspecs/11453_div 11453_div.HTML (Division/World Wide)

Departmental Tape Library

MSL5052SL SDLT Library

MSL5052, Rackmount, 0 Drive, SDLT ALL	255102-B21
MSL5052SL, SDLT, 110/220, 2 Drives, LVD, Table Top	249490-B21
MSL5052SL, SDLT, 110/220, 2 Drives, LVD, Rackmount	249491-B21

Note: Please see the StorageWorks MSL5052SL Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at: http://www5.compaq.com/products/quickspecs/11061_na/11061_na.HTML (North America) http://www5.compaq.com/productsquickspecs/11061_div/11061_div.HTML (Division/World Wide)

MSL5052S2 SDLT Library

11442 div.HTML (Division/World Wide)

MSL5052S2, Tabletop, 2 Drives, SDLT2 Library	293476-B21
MSL5052S2, Rackmount, 2 Drives, SDLT2 Library	293474-B21
MSL5052S2FC, Rackmount, 2 Drives, SDLT2 Library	293474-B24

Note: Please see the StorageWorks MSL5052S2 Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at: http://www5.compaq.com/products/quickspecs/11442_na/11442_na.HTML (North America) http://www5.compaq.com/products/quickspecs/11442_div/



MSL5030 LTO Library

301897-B21
301897-B22
301897-B23
301897-B24
301897-B25
301898-B21
301898-B22

Note: Please see the StorageWorks MSL5030 LTO Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:

http://www5.compaq.com/products/quickspecs/11439_na/

11439 na.HTML (North America)

http://www5.compaq.com/products/quickspecs/11439 div/

11439 div.HTML (Division/World Wide)

MSL5060 LTO Library

MSL5060L1, Rackmount, 0 Drive Library	301899-B21
MSL5060L1, Rackmount, 2 Drives, LTO1 Library	301899-B22
MSL5060L1FC, Rackmount, 2 Drives, LTO1 Library	301899-B23
MSL5060L1, Tabletop, 2 Drives, LTO1 Library	301900-B21

Note: Please see the StorageWorks MSL5060 LTO Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:

http://www5.compaq.com/products/quickspecs/11438_na/

11438_na.HTML (North America)

http://www5.compaq.com/products/quickspecs/11438_div/11438_div.HTML (Division/World Wide)

MSL5000 series Libraries Options

MSL5K Field Upgrade SDLT 110/220 Drive, LVD	231823-B22
MSL5000 SDLT2 Upgrade Drive	293475-B21
MSL5000 LTO1 Upgrade Drive	301901-B21
MSL5000 Dual Magazine LTO	301902-B21
MSL5000 Dual Magazine DLT	232136-B21

Required Adapters for MSL5000 series Libraries

64-Bit/66Mhz Dual Channel Wide Ultra3 SCSI	129803-B21
Adapter	

Smart Array Cluster Storage

Smart Array Cluster Storage	201724-B21
Smart Array Cluster Storage Redundant Controller Option Kit	218252-B21
4-Port Shared Storage Module with Smart Array Multipath Software for Smart Array Cluster Storage	292944-B21
128-MB Cache Module for Smart Array 5302 Controller	153506-B21
256-MB Battery-Backed Cache Module	254786-B21



Note: 128-MB Cache Module for Smart Array 5302 Controller

(PN 153506-B21) is an upgrade cache module (128 MB Standard) for Smart

Array Cluster Storage Controller.

Note: Please see the Compag Smart Array Cluster Storage QuickSpecs for additional information including configuration steps and additional options

needed for a complete solution at:

http://www5.compaq.com/products/quickspecs/11050 na/

11050 na.HTML (North America)

http://www5.compaq.com/products/quickspecs/11050 div/

11050 div.HTML (Division/World Wide)

Cluster Options

ProLiant Cluster HA/L100 LifeKeeper for Linux

303523-B21

Note: For additional information regarding the ProLiant Cluster HA/L100

LifeKeeper for Linux, please see the following QuickSpecs at: http://www5.compaq.com/products/quickspecs/11533 na/

11533 na.html (North America)

http://www5.compag.com/products/quickspecs/11533 div/

11533 div.html (Division/World Wide)

External Storage - Tower and Rack

StorageWorks Enclosure Model 4314T (tower)	190210-001
StorageWorks Enclosure Model 4314T (tower) (Int'l)	190210-B31
StorageWorks Enclosure Model 4314T (tower) (Japan)	190210-291
StorageWorks Enclosure Model 4314R (rack-mountable)	190209-001
StorageWorks Enclosure Model 4314R (rack-mountable) (Int'I)	190209-B31
StorageWorks Enclosure Model 4314R (rack-mountable) (Japan)	190209-291
StorageWorks Enclosure Model 4354R (rack-mountable)	190211-001
StorageWorks Enclosure Model 4354R (rack-mountable) (Int'I)	190211-B31
StorageWorks Enclosure Model 4354R (rack-mountable) (Japan)	190211-291
Note: The StorageWorks Enclosure 4300 Family supports the V Ultra320 1 Hot Plug Hard Drives.	Vide Ultra3,

Redundant Power Supply Option	119826-B21
Ultra3 Single Bus I/O Module Option	190212-B21
Ultra3 Dual Bus I/O Module Option	190213-B21
StorageWorks Enclosure Tower to Rack Conversion Kit	150213-B21

MSA1000 MSA 1000 201723-B22

MSA 1000 Controller	218231-B22
MSA Fibre Channel I/O Module	218960-B21
MSA1000 Fabric Switch	218232-B21
MSA 1000 Fibre Channel Adapter (FCA) 2101	245299-B21
HP StorageWorks msa hub 2/3	286763-B21



Note: Please see the HP StorageWorks modular SAN array 1000 QuickSpecs for additional options and configuration information at: http://www5.compaq.com/products/quickspecs/11033_na/11033_na.HTML_(North America) http://www5.compaq.com/products/quickspecs/11033_div/11033_div.HTML (Division/World Wide)

Compaq UPS Power Cord Reference Guide

Please see the Compaq UPS Power Cord Reference Guide that lists cable descriptions, requirements, and specifications for Compaq UPS units.

ftp://ftp.compaq.com/pub/products/servers/proliantstorage/power-protection/powercordmatrix.pdf.

Uninterruptible Power Systems – Tower

Compaq Pro UPS 500 (300 Watt) 120V (NA)	136386-001
Compaq Pro UPS 500 (300 Watt) 120V (Int'I)	136386-B31
HP UPS Model T700 (700VA, 500 Watt), Low Voltage (NA)	204015-001
HP UPS Model T700 (700VA, 500 Watt), High Voltage (Int'l)	204015-B31
HP UPS Model T700 (700VA, 500 Watt), Low Voltage (Japan)	204015-291
HP UPS Model T1000 XR (1000VA, 700 Watt), Low Voltage (NA)	204155-001
HP UPS Model T1000 XR (1000VA, 700 Watt), High Voltage (Int'I)	204155-B31
HP UPS Model T1000 XR (1000VA, 700 Watt), Low Voltage (Japan)	312803-291
HP UPS Model T1500 XR (1440VA, 1050 Watt), Low Voltage (NA)	204155-002
HP UPS Model T1500 XR (1500VA, 1050 Watt), High Voltage (Int'I)	204155-B32
HP UPS Model T1500 XR (1500VA, 1050 Watt), Low Voltage (Japan)	204155-291
HP UPS Model T2200 XR (1920VA, 1600 Watt), Low Voltage (NA)	204451-001
HP UPS Model T2200 XR (2080VA, 1600 Watt), High Voltage (NA)	204451-002
HP UPS Model T2200 XR (2200VA, 1600 Watt), Low Voltage (NA)	204451-B31
HP UPS Model T2200 XR (2200VA, 1600 Watt), Low Voltage (Japan)	204451-291
Compaq UPS R1500 XR (1440VA, 1340 Watt), Low Voltage (NA)	204404-001
Compaq UPS R1500 XR (1500VA, 1340 Watt), High Voltage (Int'l)	204404-B31

Uninterruptible Power Systems – Rack

Voltage (NA)

Compaq UPS R1500 XR (1440VA, 1340 Watt), Low Voltage (NA)	204404-001
Compaq UPS R1500 XR (1500VA, 1340 Watt), High Voltage (Int'I)	204404-B31
Compaq UPS R1500 XR (1500VA, 1340 Watt), Low Voltage (Japan)	204404-291
Compaq UPS R3000 XR (2880VA, 2700 Watt), Low Voltage (NA)	192186-001
Compag UPS R3000 XR (3000VA, 2700 Watt), High	192186-002



Compaq UPS R3000 XR (2400VA, 2250 Watt), Low Voltage (Japan)	192186-291
Compaq UPS R3000 XR (3000VA, 2700 Watt), High Voltage (Japan)	192186-292
Compaq UPS R3000 XR (3000VA, 2700 Watt), High Voltage (Int'l – detachable cord)	192186-B31
Compaq UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A IEC309 Plug)	192186-B32
Compaq UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A CEE 7/7 SCHUKO Plug)	192186-B33
Compaq UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A BS-546 Plug)	192186-AR1
Rack-Mountable UPS R6000 (6000VA, 6000 Watt) High Voltage (NA) Note: The UPS R6000 has a hardwired input.	347207-001
Rack-Mountable UPS R6000 (6000VA, 6000 Watt) High Voltage (Int'I) Note: The UPS R6000 has a hardwired input.	347207-B31
Rack-Mountable UPS R6000 (6000VA, 6000 Watt) High Voltage (Japan) Note: The UPS R6000 has a hardwired input.	347207-291
Compaq UPS R12000 XR, N ₊ x (200-240V) (WW-hardwired) Note: The UPS R12000 XR has a hardwired input and output.	207552-B22
SNMP Serial Port Card Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA.	192189-B21
Note: Supports tower and rack UPS XR models ranging	192189-B21 192185-B21
Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. Six Port Card Note: Supports tower and rack UPS XR models ranging	
Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. Six Port Card Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. High to Low Voltage Transformer (250VA) Note: Supports R6000 UPS series only. 2.5 amps @ 125	192185-B21
Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. Six Port Card Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. High to Low Voltage Transformer (250VA) Note: Supports R6000 UPS series only. 2.5 amps @ 125 Volts max output across two NEMA 5-15.	192185-B21 388643-B21
Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. Six Port Card Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. High to Low Voltage Transformer (250VA) Note: Supports R6000 UPS series only. 2.5 amps @ 125 Volts max output across two NEMA 5-15. Extended Runtime Module, T1000 XR	192185-B21 388643-B21 218967-B21
Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. Six Port Card Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. High to Low Voltage Transformer (250VA) Note: Supports R6000 UPS series only. 2.5 amps @ 125 Volts max output across two NEMA 5-15. Extended Runtime Module, T1000 XR Extended Runtime Module, R1500 XR/T2200 XR Extended Runtime Module, R1500 XR	192185-B21 388643-B21 218967-B21 218969-B21
Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. Six Port Card Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. High to Low Voltage Transformer (250VA) Note: Supports R6000 UPS series only. 2.5 amps @ 125 Volts max output across two NEMA 5-15. Extended Runtime Module, T1000 XR Extended Runtime Module, T1500 XR/T2200 XR Extended Runtime Module, R1500 XR Note: 2U each, two ERM maximum. Extended Runtime Module, R3000 XR	192185-B21 388643-B21 218967-B21 218969-B21 218971-B21
Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. Six Port Card Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. High to Low Voltage Transformer (250VA) Note: Supports R6000 UPS series only. 2.5 amps @ 125 Volts max output across two NEMA 5-15. Extended Runtime Module, T1000 XR Extended Runtime Module, T1500 XR/T2200 XR Extended Runtime Module, R1500 XR Note: 2U each, two ERM maximum. Extended Runtime Module, R3000 XR Note: 2U each, one ERM maximum. Extended Runtime Module, R6000	192185-B21 388643-B21 218967-B21 218969-B21 218971-B21 192188-B21
Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. Six Port Card Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. High to Low Voltage Transformer (250VA) Note: Supports R6000 UPS series only. 2.5 amps @ 125 Volts max output across two NEMA 5-15. Extended Runtime Module, T1000 XR Extended Runtime Module, T1500 XR/T2200 XR Extended Runtime Module, R1500 XR Note: 2U each, two ERM maximum. Extended Runtime Module, R3000 XR Note: 2U each, one ERM maximum. Extended Runtime Module, R6000 Note: 3U each, two ERM maximum. Extended Runtime Module, R12000 XR, 4U	192185-B21 388643-B21 218967-B21 218969-B21 218971-B21 192188-B21 347224-B21
Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. Six Port Card Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. High to Low Voltage Transformer (250VA) Note: Supports R6000 UPS series only. 2.5 amps @ 125 Volts max output across two NEMA 5-15. Extended Runtime Module, T1000 XR Extended Runtime Module, T1500 XR/T2200 XR Extended Runtime Module, R1500 XR Note: 2U each, two ERM maximum. Extended Runtime Module, R3000 XR Note: 2U each, one ERM maximum. Extended Runtime Module, R6000 Note: 3U each, two ERM maximum. Extended Runtime Module, R12000 XR, 4U Note: 4U each, two ERM maximum. SNMP-EN Adapter	192185-B21 388643-B21 218967-B21 218969-B21 218971-B21 192188-B21 347224-B21 217800-B21
Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. Six Port Card Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA. High to Low Voltage Transformer (250VA) Note: Supports R6000 UPS series only. 2.5 amps @ 125 Volts max output across two NEMA 5-15. Extended Runtime Module, T1000 XR Extended Runtime Module, T1500 XR/T2200 XR Extended Runtime Module, R1500 XR Note: 2U each, two ERM maximum. Extended Runtime Module, R3000 XR Note: 2U each, one ERM maximum. Extended Runtime Module, R6000 Note: 3U each, two ERM maximum. Extended Runtime Module, R12000 XR, 4U Note: 4U each, two ERM maximum. SNMP-EN Adapter Note: Supports R6000 UPS series only. Multi-Server UPS Card	192185-B21 388643-B21 218967-B21 218969-B21 218971-B21 192188-B21 347224-B21 217800-B21 347225-B21



UPS Options

207590-B21

Rack-Mountable PDUs -**1U/0U** (up to 12 outlets) Note: 0U mounting brackets shipped with the unit (separate option kit for 1U mounting).

Compaq Power Distribution Unit-16A (200 to 240V) (WW) Note: The 16A PDU also connects to the high volt models of the UPS R3000 XR (need cable PN 340653-001 (NA)) and the UPS R6000 models. Cable PN 340653-001 required if connecting to UPS R3000 XR (192186-002 NA-High Volt model only).

Compaq Power Distribution Unit-32A (200 to 240V) (Int'l) 207590-B31 Compag Power Distribution Unit-40A (200 to 240V) (WW) 207590-B23

Note: Please see the following Power Distribution Unit (Zero-U/1U PDU)

QuickSpecs for additional options including cables: http://www5.compaq.com/products/quickspecs/10838 na/

10838 na.HTML (North America)

http://www5.compaq.com/products/quickspecs/10838 div/ 10838 div.HTML (Division/World Wide)

Dual Input PDUs - 1U/0U (up to 12 outlets)

Compag Dual Input Power Distribution Unit-24A High 191186-001 Voltage (NA only)

Compaq Dual Input Power Distribution Unit-24A High 191186-B31

Voltage (Int'l)

Note: 1U/0U mounting brackets shipped with the 9000 series racks).

Note: Please see the following Power Distribution Unit (Zero-U/1U PDU)

QuickSpecs for additional options including cables: unit (optimized for 10000 and http://www5.compag.com/products/quickspecs/10838 na/ 10838 na.HTML (North America)

http://www5.compaq.com/products/quickspecs/10838 div/

10838 div.HTML (Division/World Wide)

Modular PDUs - 1U/0U (up to 32 outlets) Note: 1U/0U mounting brackets shipped with the unit (optimized for 10000

and 9000 series racks).

HP Modular Power Distribution Units (mPDU), Low Volt 252663-D71 Model, 24A (100-127 VAC) (NA, Japan)

Note: This mPDU (252663-D71) may also be used to connect the low volt model of the UPS R3000 XR.

HP Modular Power Distribution Units (mPDU), High Volt 252663-D72 Model, 24A (200-240 VAC) (NA, Japan)

HP Modular Power Distribution Units (mPDU), High Volt 252663-B31

Model, 32A (200-240 VAC) (Int'I) HP Modular Power Distribution Units (mPDU), High Volt 252663-B21

Model, 40A (200-240 VAC) (WW) Note: This mPDU (252663-B21), 40A model has a

hardwired input.

HP Modular Power Distribution Units (mPDU), High Volt 252663-B24 Model, 16A (200-240 VAC) (WW)

Note: This PDU has a detachable input power cord and allows for adaptability to country specific power requirements. This model may also be used with the high

volt UPSs R3000 XR and R6000. Note: Please see the following Modular Power Distribution Unit (Zero-U/1U

Modular PDUs) QuickSpecs for additional options including shorter jumper cables and country specific power cords:

http://www5.compaq.com/products/quickspecs/11041_na/ 11041_na.HTML (North America)

http://www5.compaq.com/products/quickspecs/11041 div/

11041 div.HTML (Division/World Wide)



PDU Options 1U PDU Mounting Brackets Kit 215852-B21

Note: The 1U PDU Mounting Brackets are required when

mounting PDU's PN 207590-xxx series in 1U

configurations.

Third Party PDU Mounting Kit 310777-B21

Note: This kit allows you to mount the Modular PDUs in racks other than the 9000/10000 Series racks (any racks using the standard 19" rail). For more details please refer

the Modular PDU QuickSpecs.

OtherEnhanced Keyboard (Carbon)296435-xx8

Mouse (Carbon) 103180-B21 Mouse (Carbon) (Japan) 103180-291

ProLiant ML330/ML350 Internal to External SCSI Cable 159547-B22

Option Kit

Note: The ProLiant ML330/ML350 Internal to External SCSI Cable Option Kit (PN 159547-B22) is supported by the

ML330 G2/ML350 Family.

Enhanced Keyboard (Carbon) Country Key Code

Dash #	Description	Dash #	Description
-008	US	-178	Arabic
-038	UK	-188	Belgium
-048	Germany	-218	Hungary
-058	France	-228	Czech
-068	Italy	-238	Solvac
-078	Spain	-248	Polish
-088	Denmark	-258	Russian
-089	Norway	-298	Japan
-108	Sweden/Finland	-338	Dutch
-128	French Canadian	-358	Finish
-138	Portugal	-B38	Int'l
-148	Turkey	-B48	BHCSY
-158	Greek		



Rack Builder Please see the Compaq Rack Builder for configuration assistance at http://www.compaq.com/rackbuilder/.		
Rack Conversion Kit	ProLiant ML350 Generation 2 Tower to Rack Conversion Kit	237045-B21
HP Rack 10000 Series	HP Rack 10842 (42U, 800mm wide) – Pallet	257415-B21
(Graphite Metallic)	HP Rack 10842 (42U, 800mm wide) - Shock Pallet	257415-B22
	HP Rack 10647 (47U) – Pallet	245160-B21
	HP Rack 10647 (47U) – Shock Pallet	245160-B23
	HP Rack 10642 (42U) – Pallet	245161-B21
	HP Rack 10642 (42U) – Shock Pallet	245161-B22
	HP Rack 10642 (42U) – Crated	245161-B23
	HP Rack 10636 (36U) - Pallet	245162-B21
	HP Rack 10636 (36U) – Shock Pallet	245162-B22
	HP Rack 10636 (36U) - Crated	245162-B23
	HP Rack 10622 (22U) – Pallet	245163-B21
	HP Rack 10622 (22U) – Shock Pallet	245163-B22
	HP Rack 10622 (22U) – Crated	245163-B23
	Note: -B21 (pallet) used to ship empty racks shipped on a truck	

Note: -B21 (pallet) used to ship empty racks shipped on a truck

-B22 (shock pallet) used to ship racks with equipment installed (by custom systems, VARs and Channels)

-B23 (crated) used for air shipments of empty racks

Note: It is mandatory to use a shock pallet in order to ship racks with equipment installed. Not all Compaq equipment is qualified to be shipped in the Rack 10000 series.

Note: Please see the Rack 10000 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color:

http://www5.compaq.com/products/quickspecs/10995_div/

10995_div.HTML (Division/World Wide)

http://www5.compaq.com/products/quickspecs/10995_na/

10995 na.HTML (North America)

Note: For additional information regarding Rack Cabinets, please see the following URL:

http://www.compaq.com/racks

Compaq	Rack	9000	Series
(Opal)			

Compaq Rack 9142 (42U) – Pallet	120663-B21
Compaq Rack 9142 (42U) - Shock Pallet	120663-B22
Compaq Rack 9142 (42U) - Crated	120663-B23
Compaq Rack 9136 (36U) – Pallet	120664-B21
Compaq Rack 9136 (36U) - Shock Pallet	120664-B22
Compaq Rack 9136 (36U) - Crated	120664-B23
Compaq Rack 9122 (22U) – Pallet	120665-B21
Compaq Rack 9122 (22U) - Shock Pallet	120665-B22
Compaq Rack 9122 (22U) - Crated	120665-B23
Compaq Rack 9842 (800mm wide, 42U) - Pallet	222192-B21



253214-R26

QuickSpecs

Note: -B21 (pallet) used to ship empty racks shipped on a truck

-B22 (shock pallet) used to ship racks with equipment installed (by custom systems, VARs and Channels)

-B23 (crated) used for air shipments of empty racks

Note: Please see the Rack 9000 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color:

http://www5.compaq.com/products/quickspecs/10366_div/

10366 div.HTML (Division/World Wide)

http://www5.compaq.com/products/quickspecs/10366_na/

10366 na.HTML (North America)

Note: For additional information regarding Rack Cabinets, please see the

following URL: http://www.compaq.com/racks

Rack Blanking Panels - Granhite (Multi)

Rack Options for HP Rack 10000 Series

Note: Contains one each of 1U, 2U, 3U, and 4U panel.	253214-B26
Rack Blanking Panels – Graphite (1U) Note: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (1U).	253214-B21
Rack Blanking Panels – Graphite (2U) Note: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (2U).	253214-B22
Rack Blanking Panels – Graphite (3U) Note: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (3U).	253214-B23
Rack Blanking Panels – Graphite (4U) Note: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (4U).	253214-B24
Rack Blanking Panels – Graphite (5U) Note: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (5U).	253214-B25
800mm Wide Stabilizer Kit (Graphite) Note: Supported by the Rack 10842 cabinet only.	255488-B21
600mm Stabilizer Kit – Graphite	246107-B21
Baying Kit for Rack 10000 series (Carbon)	248929-B21
42U Side Panel – Graphite Metallic	246099-B21
110V Fan Kit (Graphite) Note: Roof Mount Includes power cord with IEC320-C13 to Nema 5-15P	257413-B21
220V Fan Kit (Graphite) Note: Roof Mount Includes power cord with IEC320-C13 to Nema 6-15P.	257414-B21
36U Side Panel – Graphite Metallic (for 10636 Rack only)	246102-B21
47U Side Panel – Graphite Metallic (for 10647 Rack only)	255486-B21
9000/10000 Series Offset Baying Kit (42U) Note: This kit can be used to connect 9000 and 10000 series racks of the same U height together. Kit contents include hardware for connecting racks and a panel to cover the 100mm gap at the rear of the two racks.	248931-B21

Note: For additional information regarding Rack Options, please see the following URL:http://www.compaq.com/rackoptions



Rack Options for Compaq Rack 9000 Series

Baying/Coupling Kit	120669-B21
42U Side Panel	120670-B21
Note: The 42U Side Panel (PN 120670-B21) supports the	
Compaq Rack 9142 and Compaq Rack 9842.	
36U Side Panel Note: The 36U Side Panel (PN 120671-B21) supports the	120671-B21
Compaq Rack 9136.	
800mm Stabilizer Option Kit (Opal)	234493-B21
Note: The 800mm Stabilizer Kit (PN 234493-B21) supports the Rack 9842 only.	
600mm Stabilizer Option Kit	120673-B21
9142 Extension Kit	120679-B21
Note: The 9142 Extension Kit (PN 120679-B21) supports the Compaq Rack 9142 only.	
9142 Split Rear Door (Opal)	254045-B21
Note: The 9142 Split Rear Door (PN 254045-B21) supports the 600 mm wide, 42U 9000 series rack.	
9136 Extension Kit	218216-B21
9142 Short Rear Door	218217-B21
Note: The 9142 Short Rear Door (PN 218217-B21) supports the Compaq Rack 9142 only.	
9136 Short Rear Door	218218-B21
Rack Blanking Panel (Multi) Note: Kit includes four panels in 1U, 2U, 4U, and 8U.	169940-B21
Rack Blanking Panels (1U)	189453-B21
Note: The Rack Blanking Panels (PN 189453-B21) contains 10 each of (1U).	
Rack Blanking Panels (2U) Note: The Rack Blanking Panels (PN 189453-B22) contains	189453-B22
10 each of (2U).	
Rack Blanking Panels (3U)	189453-B23
Note: The Rack Blanking Panels (PN 189453-B23) contains 10 each of (3U).	
Rack Blanking Panels (4U)	189453-B24
Note: The Rack Blanking Panels (PN 189453-B24) contains	100400 B24
10 each of (4U).	
Rack Blanking Panels (5U) Note: The Rack Blanking Panels (PN 189453-B25) contains	189453-B25
10 each of (5U).	
9000/10000 Series Offset Baying Kit (42U)	248931-B21
Note: This kit can be used to connect 9000 and 10000 series racks of the same U height together. Kit contents	
include hardware for connecting racks and a panel to cover	
the 100mm gap at the rear of the two racks.	
Note: For additional information regarding Rack Options, pleas following URL:http://www.compaq.com/rackoptions	e see the
ionowing OTE.http://www.compaq.com/rackoptions	

Rack Options for Compaq Rack 7000 Series High Air Flow Rack Door Insert for 7122 157847-B21

High Air Flow Rack Door Insert for 7142 327281-B21

High Air Flow Rack Door Insert for 7142 (6 pack) 327281-B22

Compaq Networking Cable Management Kit 292407-B21

Compaq Networking Recessed Rail Management Kit 292406-B21



Compaq Rack Extension Kit for 7142

154392-B21

Note: For additional information regarding Rack Options, please see the following URL:http://www.compaq.com/rackoptions

Rack Options for Rack 7000, 9000 and 10000 Series

Monitor Utility Shelf	303606-B21
Ballast Option Kit	120672-B21
100kg Sliding Shelf	234672-B21
Rack Rail Adapter Kit (25-inch depth)	120675-B21
Cable Management D-Rings Kit	168233-B21
Monitor/Utility Shelf - Graphite	253449-B21
Depth Adjustable Fixed Rail	332558-B21
Console Management Controller (CMC) Option Kit	203039-B21
Console Management Controller (CMC) Sensors Option Kit	203039-B22
Console Management Controller (CMC) Locking Option Kit	203039-B23
Console Management Controller (CMC) Smoke Sensors Option Kit	203039-B24
Server Console Switch 1 x 2 port (100 to 230 VAC)	120206-001
Server Console Switch 1 x 2 port (100 to 230 VAC) (Int'I)	120206-B31
Server Console Switch 1 x 2 port (100 to 230 VAC) (Japan)	120206-291
Server Console Switch 1 x 4 port (100 to 230 VAC)	400336-001
Server Console Switch 1 x 4 port (100 to 230 VAC) (Int'l)	400336-B31
Server Console Switch 1 x 4 port (100 to 230 VAC) (Japan)	400336-291
Server Console Switch 1 x 8 port (100 to 230 VAC)	400337-001
Server Console Switch 1 x 8 port (100 to 230 VAC) (Int'l)	400337-B31
Server Console Switch 1 x 8 port (100 to 230 VAC) (Japan)	400337-291
Server Console Switch 2 x 8 port (100 to 230 VAC)	400338-001
Server Console Switch 2 x 8 port (100 to 230 VAC) (Int'l)	400338-B31
Server Console Switch 2 x 8 port (100 to 230 VAC) (Japan)	400338-291
Server Console Switch 2 x 8 port (48 VDC)	400542-B21
IP Console Switch Box, 1x1x16	262585-B21
IP Console Switch Box, 3x1x16	262586-B21
IP Console Interface Adapter, 8 pack	262587-B21
IP Console Interface Adapter, 1 pack	262588-B21
IP Console Expansion Module	262589-B21
KVM 9 PIN Adapter (4 Pack)	149361-B21
CPU to Server Console Cable, 12	110936-B21
CPU to Server Console Cable, 20	110936-B22
CPU to Server Console Cable, 40	110936-B23
CPU to Server Console Cable, 3	110936-B24
CPU to Server Console Cable, 7	110936-B25
CPU to Server Console Cable (Plenum Rated) 20	149363-B21
CPU to Server Console Cable (Plenum Rated) 40	149364-B21
IP CAT5 Cable 3 , 4 pack	263474-B21
IP CAT5 Cable 6 , 8 pack	263474-B22
IP CAT5 Cable 12, 8 pack	263474-B23
V 1 1 2	



 IP CAT5 Cable 20 , 4 pack
 263474-B24

 IP CAT5 Cable 40 , 1 pack
 263474-B25

 Switch Box Connector Kit (115 V)
 144007-001

 Switch Box Connector Kit (230 V)
 144007-002

 Switch Box Connector Kit (High Voltage) (Int'I)
 144007-B33

 1U Rack Keyboard & Drawer (Carbon)
 257054-xx1

Note: The 1U Rack Keyboard & Drawer

(PN 257054-xx1) is to be used with the Keyboards for Racks with Trackball (PN 158649-xxx).

Country Code Key (for 1U Rack Keyboard & Drawer (PN 257054-xx1))

XX = 001	US	XX = 091	Norway
XX = 031	UK	XX = 101	Sweden/Finland
XX = 041	Germany	XX = 111	Switzerland
XX = 051	France	XX = 131	Portugal
XX = 061	Italy	XX = 181	Belgium
XX = 071	Spain	XX = 291	Japan
XX = 081	Denmark	XX = B31	International

TFT5600 Rack Keyboard Monitor

221546-xx1

Country Code Key (for TFT5600 RKM Rack Keyboard Monitor (PN 221546-xx1))

XX = 001	US	XX = 091	Norway
XX = 031	UK	XX = 101	Sweden/Finland
XX = 041	Germany	XX = 111	Switzerland
XX = 051	France	XX = 131	Portugal
XX = 061	Italy	XX = 181	Belgium
XX = 071	Spain	XX = 291	Japan
XX = 081	Denmark	XX = B31	International

PCI KVM Management Card Kit	232983-B21
PCI KVM Remote Card Kit	232984-B21
Local Access Cable Kit	232985-B21
1U Rack Keyboard Drawer	338056-B21
Input Device Adjustable Rails	287139-B21

Note: Input Device Adjustable Rails (287139-B21) are for use ONLY with the TFT5110R, TFT5600RKM and integrated keyboard/drawer which is used in mounting into third party racks.

Input Device Telco Rail 287138-B21

Note: Input Device Telco Rails (287138-B21) are for use ONLY with the TFT5110R, TFT5600RKM and integrated keyboard/drawer which is used in mounting into third party racks.

Keyboard/Monitor/Mouse extension cables 169989-001

Note: For additional information regarding Rack Options, please see the following URL:http://www.compaq.com/rackoptions



Service and Support Offerings (CarePaq Services)

Hardware Services 4-Hour On-site Service

9 x 5 Coverage, 3 Years (2-5-2 Part Number for Canada)	FP-EL4HR-36
9 x 5 Coverage, 3 Years (6-3 Part Number for U.S.)	162676-002
9 x 5 Coverage, 3 Years (6-3 Part Number for EMEA)	324416-022
24 x 7 Coverage, 3 Years (2-5-2 Part Number for Canada)	FP-EL724-36
24 x 7 Coverage, 3 Years (6-3 Part Number for U.S.)	162675-002
24 x 7 Coverage, 3 Years (6-3 Part Number for EMEA)	376910-022
Installation & Start-up Services	
Hardware Installation (2-5-2 Part Number for Canada)	FP-ELINS-IN
Hardware Installation (6-3 Part Number for US)	401791-002
Server Installation and Set-Up (Installation of the server, installation of the appropriate service tools, check to ensure device SW and firmware is loaded and installation of the operating system software (6-3 Part Number for EMEA)	204563-022
Pre-installation planning; unpack equipment, install most current Compaq HW options internal to server at same time of server installation; assemble & test; basic user information provided; Install & configure basic functionality of Win NT Operating System plus up to 1 day start-up activity, configure print & network access services, and orientation (6-3 Part Number for U.S.)	240013-002
Pre-installation planning; unpack equipment, install most current Compaq HW options internal to server at same time of server installation; assemble & test; basic user information provided; Install & configure basic functionality of Win NT Operating System plus up to 1 day start-up activity, configure print & network access services, and orientation (2-5-2 Part Number for Canada)	FM-MSTEC-01
Pre-installation planning; unpack equipment, install most current Compaq HW options internal to server at same time of server installation; assemble & test; basic user information provided; Install & configure basic functionality of Novell NetWare Operating System plus up to 1 day start-up activity, configure print & network access services, and orientation (6-3 Part Number for U.S.)	240008-002
Pre-installation planning; unpack equipment, install most current Compaq HW options internal to server at same time of server installation; assemble & test; basic user information provided; Install & configure basic functionality of Novell NetWare Operating System plus up to 1 day start-up activity, configure print & network access services, and orientation (2-5-2 Part Number for Canada)	FM-NSTEC-01
CarePaq Priority Services for ProLiant Servers – Priority Level	
9 x 5 HW, 4-hr response, Next Available HW engineer; 9	239928-002



x 5 Bronze Software Support 2-hr response for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Next Available Specialist (6-3

Part Number for U.S.)

9 x 5 HW, 4-hr response, Next Available HW engineer; 9 x 5 Bronze Software Support 2-hr response for Novell NetWare Operating System, Next Available Specialist (6-3 Part Number for U.S.)	239968-002
9 x 5 HW, 4-hr response, Next Available HW engineer; 9 x 5 Bronze Software Support 2-hr response for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Next Available Specialist (2-5-2 Part Number for Canada)	FM-M01E1-36
9 x 5 HW, 4-hr response, Next Available HW engineer; 9 x 5 Bronze Software Support 2-hr response for Novell NetWare Operating System, Next Available Specialist (2-5-2 Part Number for Canada)	FM-N01E1-36
9 x 5 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), Three Years (6-3 Part Number for EMEA)	179834-022
CarePaq Priority Services for ProLiant Servers – Priority 24 Level	
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Bronze Software Support, 2-hr response for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Next Available Specialist (6-3 Part Number for U.S.)	239930-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Bronze Software Support, 2-hr response for Novell NetWare Operating System, Next Available Specialist (6-3 Part Number for U.S.)	239970-002
7 x 24 4-hour H/W, 7 x 24 2-hour O/S (NT & NetWare), Three years (6-3 Part Number for EMEA)	179839-022
CarePaq Priority Services for ProLiant Servers – Priority Silver	
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday – Friday, 8AM – 5PM local time, 2-hr response after hours for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review, proactive patch notification, 1 System Healthcheck per year (6-3 Part Number for U.S.)	239932-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (6-3 Part Number for U.S.)	239934-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday – Friday, 8AM – 5PM local time, 2-hr response after hours for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review (6-3 Part Number for U.S.)	239972-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Novell NetWare Operating System (6-3 Part Number for U.S.)	239974-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday – Friday, 8AM – 5PM local time, 2-hr response after hours for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review,	FM-M04E1-36



proactive patch notification, 1 System Healthcheck per year (2-5-2 Part Number for Canada)

24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (2-5-2 Part Number for Canada)

24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday – Friday, 8AM – 5PM local time, 2-hr response after hours for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review (2-5-2

24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Novell NetWare Operating System (2-5-2 Part Number for Canada)

Note: For more information, customer/resellers can contact http://www.compaq.com/services. FM-N24E1-36

FM-M24F1-36

FM-N04E1-36

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Overview Standard Features Models Options Memory Storage

Part Number for Canada)

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Memory

Compaq ProLiant ML350 G2 Array Models

Standard Memory

256-MB PC133-MHz Registered ECC SDRAM DIMM installed (1 x 256-MB SDRAM DIMM)

Standard Memory Plus Optional Memory

Up to 3328-MB memory is available with the optional installation of PC133-MHz Registered ECC SDRAM DIMM memory kits.

Standard Memory Replaced with Optional Memory

Up to 4096-MB of memory is available with the removal of the standard 256-MB of memory and the optional installation of PC133-MHz Registered ECC SDRAM DIMM memory kits.

Note: Charts do not represent all possible memory configurations.

Memory			Slot			
		1	2	3	4	
Standard	256 MB	256 MB	Empty	Empty	Empty	
Optional	3328 MB	256 MB	1024 MB	1024 MB	1024 MB	
Maximum	4096 MB	1024 MB	1024 MB	1024 MB	1024 MB	

Following are memory options available from Compaq:

•	1024-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit	128280-B21
•	512-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit	128279-B21
•	256-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit	128278-B21
•	128-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit	128277-B21



Compaq ProLiant ML350 G2 Models

Standard Memory

128-MB PC133-MHz Registered ECC SDRAM DIMM installed (1 x 128-MB SDRAM DIMM)

Standard Memory Plus Optional Memory

Up to 3200-MB memory is available with the optional installation of PC133-MHz Registered ECC SDRAM DIMM memory kits.

Standard Memory Replaced with Optional Memory

Up to 4096-MB of memory is available with the removal of the standard 128-MB of memory and the optional installation of PC133-MHz Registered ECC SDRAM DIMM memory kits.

Note: Charts do not represent all possible memory configurations.

<u></u>	Memory		Slot			
		1	2	3	4	
Standard	128 MB	128 MB	Empty	Empty	Empty	
Optional	3200 MB	128 MB	1024 MB	1024 MB	1024 MB	
Maximum	4096 MB	1024 MB	1024 MB	1024 MB	1024 MB	

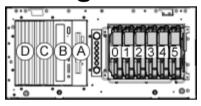
Following are memory options available from Compaq:

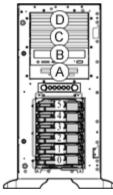
 1024-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 	128280-B21
 512-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 	128279-B21
 256-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 	128278-B21
 128-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 	128277-B21

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Overview Standard Features Models Options Memory Storage Power Specifications TechSpecs

Storage





- 0 5 6 x 1 in SCSI Hard Drive Bays
- A 3.5 in Diskette Drive
- B 40x CD-ROM
- C, D Available half height bay

Drive Support

	Quantity Supported	Position Supported	Controller
Removable Media			
1.44-MB Diskette Drive	Up to 1	Α	Integrated
IDE (ATAPI) CD-ROM Drive	Up to 2	B, C, D	Integrated IDE (ATAPI)
DVD-ROM Drive Option Kit	Up to 2	B, C, D	Integrated IDE
ML3xx Internal Two Bay Hot Plug SCSI Drive Cage	Up to 1	C, D	Integrated SCSI

Hard Drives



Ultra320 Hot Pluggable **Drives**

0-7 Integrated Dual Channel Wide Ultra3 SCSI Up to 8 1-inch 146.8-GB 10,000 rpm

(With optional Adapter

Smart Array 532 Controller ML3xx Internal 72.8-GB 10,000 rpm

36.4-GB 10,000 rpm Two Bay Hot (Note: The Smart Array 532 Controller ships Plug SCSI Drive 72.8-GB 15,000 rpm standard with the Array models.)

36.4-GB 15,000 rpm Cage Compag RAID LC2 Controller 18.2-GB 15,000 rpm Smart Array 5302/128 Controller Smart Array 5304/256 Controller

64-bit/66-MHz Dual Channel Wide Ultra3

SCSI Adapter

64-bit/66-MHz Single Channel Wide Ultra3

SCSI Adapter

Adapter

*Note: All U320 Universal Hard Drives are backward compatible to U2 or U3 speeds and will run at U3 within the ML350 G2.

External Storage

StorageWorks Enclosure Up to 24 External Integrated Dual Channel Wide Ultra3 SCSI

4300 Family

(supports Wide Ultra2/Ultra3 Smart Array 532 Controller

1 drives)

(Note: The Smart Array 532 Controller ships

standard with the Array models.) Smart Array 5302/128 Controller Smart Array 5304/256 Controller

64-bit/66-MHz Dual Channel Wide Ultra3

SCSI Adapter

64-bit/66-MHz Single Channel Wide Ultra3

Please see the MSA 1000 QuickSpecs (URL

below) for the latest list of supported HBA's

SCSI Adapter

MSA 1000 Please see the External

> MSA 1000 QuickSpecs below to determine

configuration requirements

MSA 1000: http://www5.compag.com/products/guickspecs/11033 div/11033 div.HTML

Quantity **Position**

Supported Supported Controller

Maximum Storage Capacity – (StorageWorks Enclosure)

1.174 TB (6 x 146.8-GB 1 Ultra 320 hot plug hard drives with standard Internal

internal drive cage + 2 x 146.8-GB 1 Ultra 320 Hot plug hard drive using the

optional ML3xx Internal Two Bay Hot Plug SCSI Drive Cage)

External 49.324 TB (14 x 146.8 GB) x 24

50.499 TB Total

Tape Drives

Note: For an up-to-date listing of the latest O/S Support details for each of the Tape Drives listed below, please see the following:

http://www5.compaq.com/products/quickspecs/North America/10233.html (North America) http://www5.compag.com/products/quickspecs/Division/10233.html (Division/World Wide)

Note: For an up-to-date listing of the latest O/S Support details for each of the Tape Storage Systems listed below, please see the following:



http://www5.compaq.com/products/quickspecs/North_America/10809.html (North America) http://www5.compaq.com/products/quickspecs/Division/10809.html (Division/World Wide)

Internal AIT 100-GB, Hot Plug Internal AIT 50-GB, Hot Plug Internal AIT 35-GB, LVD Hot Plug Internal 20/40-GB DAT Drive, Hot Plug	ML3xx Internal Two Bay Hot Plug SCSI Drive Cage)		Integrated Dual Channel Wide Ultra3 SCSI Adapter Smart Array 532 Controller Smart Array 5302/128 Controller Smart Array 5304/256 Controller 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter *Note: The Smart Array 532 Controller does not support the AIT 100-GB Hot Plug Tape Drive.
Internal 12/24-GB DAT Drive	Up to 2	С	Integrated Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
Internal 40/80-GB DLT Enhanced	Up to 1	C + D	Integrated Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
HP StorageWorks AIT 35 GB Autoloader	Up to 1 (for a single HBA) Up to 2 (for a dual HBA)	External	64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
AIT 100-GB Internal AIT 50-GB Internal AIT 35-GB, LVD Internal	Up to 2	C, D	Integrated Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
20/40-GB DAT 8 Cassette Autoloader Internal	Up to 1	C, D	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-Bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
AIT 100-GB External AIT 50-GB External AIT 35-GB, LVD External	2	External	Integrated Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
External 40/80-GB DLT Enhanced	Up to 3	External	Integrated Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
SSL2020 AIT Mini-Library	Up to 5	External	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
MSL5026DLX (40/80GB DLT-based) MSL5026SL (SDLT-based) Library	2 drives per SCSI channel	External	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter



MSL5052SL (SDLT-based)

Library

MSL5052S2 (SDLT-based)

Library

MSL5030L1 (LTO-based)

Library

MSL5060L1 (LTO-based)

Library

20/40-GB DAT 8 Cassette

Autoloader External

Up to 1

External

64-Bit/66-MHz Dual Channel Wide Ultra3

SCSI Adapter

64-Bit/66-MHz Single Channel Wide Ultra3

SCSI Adapter

DLT1 1280 SuperLoader Up to 2 drives External

64-Bit/66-MHz Dual Channel Wide Ultra3

SCSI Adapter

64-Bit/66-MHz Single Channel Wide Ultra3

SCSI Adapter

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Power Specifications

Part Number 243406-001

Spare Kit 249687-001
Operational Input Voltage Range (V rms) 90 to 264

Frequency Range (Nominal) (Hz) 47 to 63 (50/60)

Nominal Input Voltage (Vrms)	100	115	208	220	230	240
Max Rated Output Wattage Rating	350	350	350	350	350	350
Nominal Input Current (A rms)	5.5	4.8	2.6	2.5	2.4	2.3
Max Rated Input Wattage Rating (Watts)	538	538	538	538	538	538
Max. Rated VA (Volt-Amp)	549	549	549	549	549	549
Efficiency (%)	65	65	65	65	65	65
Power Factor	0.98	0.98	0.98	0.98	0.98	0.98
Leakage Current (mA)	0.31	0.36	0.65	0.69	0.72	0.75
Maximum Inrush Current (A peak)	25	25	25	25	25	25
Maximum Inrush Current duration (mS)	20	20	20	20	20	20

System Specifications

ML350 G2 Fully Configured

Up to 2 Processors, 4 Memory Slots, 8 Hard Drives, 6 PCI Slots, and 2 Hot Plug Power Supplies



Nominal Input Voltage (Vrms)	100	115	208	220	230	240	
Fully Loaded System Input Wattage (W)	441	434	428	421	415	409	
Fully Loaded System Input Current (A rms)	4.5	3.9	2.1	2.0	1.8	1.7	
Fully Loaded System Thermal (BTU-Hr)	1503	1480	1458	1436	1416	1395	
Fully Loaded System VA (Volt-Amp)	450	443	436	430	424	418	
System Leakage with all power supplie loaded (mA)	s 0.63	0.72	1.30	1.38	1.44	1.50	
System Inrush Current with all power supplies loaded (A)	50	50	50	50	50	50	
Power cord requirements			Option no./Spare no: See Power Cord chart				
	IEC320-C13 to IEC320-C14			Option no./Spare no: 142259- 001/142258-B21			

Notes:

ActiveAnswers Power Calculation

Power calculator is LIVE on ActiveAnswers website. This is an external link.

Follow this link:

http://activeanswers.compaq.com/aaconfiguratorcode/configurationUi.asp?HTMLFilename

=Mainselections&UiLocalization=UnitedStates&DisplayCountry=United%20States

To drill down to calculators:

- Click on: "ProLiant Servers"
- Click on the Server of interest. Example: ML350 G2
- Click on: "Power Calculator" link. (You may need to scroll down to see it)

Power Cords (13 Cord Sets)	Power Cord Part Number	
Country		
APD	139867-006	
APD	100613-003	
APD	100614-003	
Australia	100611-007	
Europe	100614-003	
France	100614-003	
Germany	100614-003	
Japan	139867-006	
PRC	139867-006	
PRC	100613-003	
PRC	100661-007	
UK	100613-003	
US	163719-002	

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Overview Standard Features Models Options Memory Storage

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TechSpecs

System Unit – Tower Dimensions 18.5 x 8.5 x 26 in/46.99 x 21.59 x 66.04 cm

(HxWxD) (with feet/bezel)

17.5 x 8.5 x 24 in/44.50 x 21.59 x 60.96 cm

Dimensions (HxWxD)

(without feet/bezel)



Weight 60 lb/27.24 kg (without hard drives)

(approximate)

Input Requirements Rated Input Voltage 100 to 120 VAC/200 to 240

(per power supply)

Rated Input 50 Hz to 60 Hz

VAC

Frequency

Input Power 538W @ 110 VAC

Rated Input Current 6A/3A

Line Frequency 50 to 60 Hz
BTU Rating 1, 839 BTU/hr

SCSI Connectors Two internal HD68 connectors

(Support for either two internal, two external, or a mix of internal/external is available. This is achieved using an internal to external SCSI cable option kit (PN 159547-B21 or PN 159547-B22) and either of the two

109047-B21 01 PN 109047-B22) and

SCSI knockouts.)

Power Supply
Output Power

Rated Steady-State

350W

Output Power Power (per power supply)

Maxim

Maximum Peak Power 400W

Temperature Range Operating 50° to 93° F/10° to 35° C (No

direct sustaining sunlight)
Altitude range derating: 33.8°

F/1° C per

984.25 ft/300 m up to 9,842.5

-4° to 140° F/-20° to 60° C

-20° to 140° F/-29° to 60° C

ft/3,000 m

5% to 80%

5% to 90%

Storage (up to one

year)

Altitudes up to 9,842.5

ft/ 3,000m

Shipping (up to 72

hours)

Altitudes up to 29,855.5 ft/ 9100m

Relative Humidity Operating (non-condensing) Non-operating

Acoustic Noise Idle

(Fixed Disk Drives

Spinning)

L _{WAd} (BELS) 6.4 **L** _{pAm} (dBA) 45

Operating

(Random Seeks to

Fixed Disks)

L _{WAd} (BELS) 6.7 **L** _{pAm} (dBA) 48



System Unit - Rack

Dimensions 8.61 x19 x 24 in/21.87 x48.26 x 60.96 cm

(HxWxD)

Weight 60 lb/27.24 kg (without hard drives)

(approximate)

Input Requirements 100 to 120 VAC/200 to 240 Rated Input Voltage VAC

(per power supply)

50 to 60 Hz Rated Input

Frequency

Input Power 538W @ 110 VAC

Rated Input Current 6A/3A

Line Frequency 50 to 60 Hz **BTU Rating** 1,839 BTU/hr

SCSI Connectors Two internal HD68 connectors

> (Support for either two internal, two external, or a mix of internal/external is available. This is achieved using an internal to external SCSI cable option kit (PN 159547-B21 or PN 159547-B22) and either of the two

> > 3050W

SCSI knockouts.)

Power Supply Output Power (per power supply)

Rated Steady-State

Power

Temperature Range Operating

50° to 93° F/10° to 35° C (No direct sustaining sunlight) Altitude range derating: 33.8°

F/1° C per

984.25 ft/300 m up to 9,842.5

-4° to 140° F/-20° to 60° C

-20° to 140° F/-29° to 60° C

ft/3,000 m

Storage (up to one

year)

Altitudes up to 9,842.5

ft/

3,000m

Shipping (up to 72

hours) Altitudes up to 29,855.5 ft/ 9100m

Relative Humidity (non-condensing) Operating 5% to 80% Non-operating 5% to 90%

Acoustic Noise Idle

(Fixed Disk Drives

Spinning)

 L_{WAd} (BELS) 5.02 L_{pAm} (dBA) 35.9

Operating

(Random Seeks to

Fixed Disks)

L WAd (BELS) 5.87 L_{pAm} (dBA) 40.9



1.44-MB Diskette Drive

LED Indicators (front

panel)

Read/Write Capacity

Diskette (high/low

density)

Drive Supported One **Drive Height** One-third **Drive Rotation** 300 rpm 500/250 Kb/s

Transfer Rate

(high/low)

512

Bytes/Sector Sectors/Track (high/low)

18/9

Tracks/Side (high/low)

80/80

Access Times

Track-to-Track (high/low)

1.44 MB/720 KB

3/6 ms

Average (high/low)

169/94 ms

Settling Time Latency Average 15 ms 100 ms

Cylinders (high/low) 80/80 **Read/Write Heads**

Disk

Two

40X Max IDE (ATAPI) CD-**ROM Drive**

CD-ROM, CD-XA, CD-DA Applicable Disk

(Mode 1, Mode 2, Form 1 and 2)

Photo CD (Single and Multi-session)

Mixed Mode (Audio and Data

combined)

CD-R

Capacity 540 MB (Mode 1, 12 cm)

650 MB (Mode 2, 12 cm)

Block Size Mode 1 2,048 bytes

> Mode 2 2,340 bytes, 2,336 bytes

CD-DA 2,352 bytes CD-XA 2,328 bytes

Interface IDE (ATAPI)

Access Times Random 100 ms (typical) Full-Stroke 150 ms

Audio Output

Line-Out

0.7 VRMS at 47 kOhms

Level

Sustained

150 KB/s (1X audio)

Data Transfer Rate

Burst

16.67 Mbytes/sec

Cache Buffer 128 KB Start-up Time

(typical)

< 7 seconds



Stop Time < 4 seconds

Laser Type Semiconductor Laser GaA1As

Parameters Wave Length $780 \pm 25 \text{ nm}$

Operating Temperature 41° to 113°F/5° to 45°C

Conditions Humidity 10% to 80%

Dimensions (HxWxD, maximum) 1.7 x 5.85 x 8.11 in/

4.29 x 150 x 208 cm

Weight 2.09 lb/0.95 kg

Integrated Dual Channel Wide Ultra3 SCSI Adapter

Drives Supported Up to 28 SCSI devices (14 per channel)

Data Transfer Method64-bit PCI bus-masterSCSI Channel Transfer Rate80 MB/s per channelMaximum Transfer Rate per PCI133 MB/s per channel

Bus (peak)

SCSI Protocols Wide Ultra2 SCSI

Wide-Ultra SCSI-3

Fast SCSI-2

Electrical Protocol Low Voltage Differential (LVD)

SCSI Termination Active Termination

External SCSI Connectors

Two 80-Pin VHDCI connectors

Internal SCSI Connectors

Two 68-Pin Wide-Ultra SCSI-3

connectors

Video Controller

Controller Chip ATI RAGE XL

Video DRAM 8-MB Video SDRAM

Data Transfer Method 32-bit PCI

Support Resolution Supported Color Depths:

640 x 480 16.7M, 64K, 256, 16 800 x 600 16.7M, 64K, 256, 16 1024 x 768 16.7M, 64K, 256, 16 1152 x 864 16.7M, 64K, 256, 16 1280 x 1024 16.7M, 64K, 256, 16 1600 x 1200 64K, 256, 16

Connector VGA

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